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PERSONAL.

Mr. George W. Carey has been elected Superintendent of the Media Water Works, Media, Pa.

Mr. M. H. Mills has been appointed Assistant Superintendent of the Fort Worth & Denver City Ry.

Mr. G. M. Eldridge has recently been appointed Superintendent of the Tampa Water Co., of Tampa, Fla.

Mr. D. W. Cole, Civil Engineer, has taken a position in the Bureau of Engineering, of Waterbury, Conn

Mr. Chas. E. Cheney, City Engineer of Frankfort, Ind., was recently married to Miss Margaret B. Southard.

Mr. W. E. Harrington has resigned as General Manager of the Camden & Suburban Ry., to take effect Jan. 1.

Mr. G. E. Higgins, Civil Engineer, has been engaged on the extension of the Syracuse & Suburban R. R. to Delphi.

Mr. Percival W. St. George has resigned his position City Surveyor of Montreal, which he has held for the last 17 years.

Mr. James N. Hill, Third Vice-President of the Great Northern Ry., has been elected President of the Montana Central Ry.

Professor M. A. Aldrich, Assistant in the Department of Conomics, Leland Stanford, Jr., University of California, has resigned.

Mr. J. E. Baldwin, Electrical Contractor, of New York, was married on Nov. 3 to Miss Agnes M. Warner, of East Williston (L. I.), N. Y.

Mr. L. B. Stillwell, M. Am. Inst. E. E., has been appointed Electrical Director of the Rapid Transit Construction Co. of New York.

Mr. A. L. Saunders, of Nevada, Ia., with the Engineer Corps of the Chicago & Northwestern R. R., has married to Miss Sarah N. Hix.

Mr. Lee Riley has been appointed Superintendent of the Metropolitan Water Co.'s works at Kansas City, Kan., vice Mr. George B. Wing, resigned.

Mr. Frank Howard, Superintendent of the Standard Elec-Lansing, of Corning, N. Y., on Oct. 24.

Mr. Thomas Bernard has been appointed Engineer of Maintenance of way of the Alabama Great Southern Ry., with headquarters at Chattanooga, Tenn.

Mr. F. C. Tucker has been appointed Superintendent of Terminals of the Macon, Dublin & Savannah R. R., with office at Macon, Ga., vice Mr. John Byrne, retired.

Mr. F. A. Snyder, Assistant City Engineer of Williams port, Pa., has resigned to accept a position with the New York Central & Hudson River R. R., at Clearfield, Pa.

Mr. H. M. McCartney, Chief Engineer and Superinten ent of the Arizona & Utah Ry., has been appointed Chief Engineer of the projected Los Angeles & Salt Lake Ry.

Mr. Duncan McDonald. Superintendent of the Montreal Street Ry., of Montreal, Que, has been appointed General Manager of the Compagnie Metropolitan of Paris, France.

Mr. T. H. Fitzpatrick has been appointed Superintendent of the Nevada-California-Oregon Ry., with headquarters at Reno, Nev., vice Mr. E. F. Smith, assigned to other du-

Mr. W. D. Lee, Superintendent of the Rio Grande Southern R. H., has been appointed Assistant Superintendent of the Second and Third Divisions of the Denver & Rio Grande R. R.

Mr. J. A. Rice, formerly Surveyor for the Cochiti Gold Mining Co., of Albemarie, N. M., has been appointed Superintendent of the Lone Star Mine for the Navajo Gold Mining Co. in Bland.

Mr. Charles E. Webster, formerly Chief Engineer of the Erie & Wyoming Valley R. R., has been appointed Chief Engineer of the West Branch Valley R. R., with head-quarters at Clearfield, Pa.

Mr. George E. Dunklee, formerly General Freight and Passenger Agent of the Dansville & Mount Morris R. R. has been appointed General Superintendent, with head-quarters at Dansville, N. Y.

Mr. Richard Barthel, of Snyder, Barthel & Co., of New Orleans, La., and Secretary and Treasurer of the Central American Improvement Co., has left New Orleans for

Puerto Barrios, Guatemala, to take charge of the Guatemala Northern R. R., which has come into the post of the latter company.

Mr. A. J. Frazier, Superintendent of the Birmingham Division of the Southern Ry., has been appointed Superin-tendent of the Alabama Great Southern R. R., with headquarters at Birmingham, Ala.

Mr. James Hopkins has resigned as one of the receivers of the Omaha, Kansas City & Eastern R. R., Omaha & St. Louis R. R., leaving Mr. Chas. H. Chappell, of Kansas City, Mo., as sole Receiver.

Mr. Arthur Emile Doucet, M. Can. Soc. C. E., graduate of the Roya. Military College, has been appointed Chief Engineer of the Great Northern Ry. of Canada and the Quebec & Lake St. John Ry.

Arthur Boyd, of Saginaw, Mich., surveyor for the Pere Marquette Coal Co., of Saginaw, has accepted a posi-tion as Superintendent and Engineer of the Coal and Coke Co., of Boomer, Fayette county, W. Va.

G. F. Hawks has been appointed Superintendent of the Mexican Central Ry., vice Mr. C. B. Cox, assigned to other duties, and is succeeded as Superintendent of the San Louis Division by Mr. C. O. Wheeler.

Mr. J. C. Ford, formerly Superintendent of Rail Lines in Washington for the Pacific Coast Co., has been appointed Assistant General Manager, with headquarters at Seattle, Wash., and the former office has been abolished.

Mr. Robert H. England has been appointed General Manager of the recently incorporated Marietta, Columbus & Cleveland Ry., with office at Marietta, O. Mr. England is also General Manager of the Dansville & Mt. Morris R. R.

Mr. H. A. Parker, First Vice-President and General the Chicago, Rock Island & Pacific been appointed President of the Chicago, Rock Island & Texas Ry., and not of the former road, as noted in our issue of Nov. 15.

Mr. W. F. DeCamp has resigned as Superintendent of the Lillie Mine at Cripple Creek, Colo., and will establish his headquarters in Denver, Colo., as the representative of a syndicate of mining men, owners of large interests in the Western mining fields.

Mr. Joseph S. Hill, Mr. Henry O. Pixley and Mr. Alexander Colt, students of the University of California, have been selected to help Mr. George Putnam and Mr. F. W. Edmonds, Engineers of the Coast and Geodetic Surveys, to chart the Philippine archipelago.

Lieut. Henry A. Wylie, U. S. N., has been appointed by the Board of Education of New York City to Executive Officer of the Nautical School, vice Lieut. George R. Evans, retired. Lieut. W. S. Montgomery has been appointed to succeed Lieut. Wylie as Senior Instructor.

Mr. George A. Littleton has resigned the Superintendency of the Milwaukee & Superior Ry., which has been acquired by the Chicago, Milwaukee & St. Paul Ry., and the jurisdiction of Mr. B. F. Van Vliet, Superintendent of the Northern Division of the latter company, has been extended over the acquired line.

Mr. J. W. Blabon has been elected President of the Seattle & Northern R. R. Mr. F. E. Ward has been appointed General Superintendent, with office at St. Paul, Minn.; Mr. P. T. Downs, Assistant General Superintendent, with office at Spokane, Wash., and Mr. H. E. Byram, Superintendent, with office at Everett, Wash.

OBITUARY

Mr. Edward H. Kellogg, manufacturer of lubricating oils, died at Brooklyn, N. Y., on Nov. 17.

Mr. James W. Bowden, Chief Engineer of the Susque hanna Coal Co., died at Meadville, Pa., on Nov. 16.

Mr. Guy De Yaulus, Mining Engineer and Financial Agent of the Anglo-American Consolidated Gold Mining ., of New York City, died on Nov. 12.

Mr. H. C. Freeman, M. Am. Inst. M. E., died at his ome in Helena, Mont., on Nov. 12. Mr. Freeman served in the Civil War and became Chief Engineer of the Third

Mr. Llewellyn Le Count, C. E., Assistant Instructor in Engineering at the Columbia University, died of typhoid fever on Nov. 14. Mr. Le Count graduated last June from the School of Engineering, Columbia University, and became an assistant instructor on Oct. 1.

Mr. A. W. Reed, Civil Engineer, died Oct. 26, between San Nicholas Del Oro, Estado De Guerrero, and the City of Mexico, Mex., while enroute from his mines, where h had been engaged for the past four years, to the United States. Mr. Reed was formerly Assistant Engineer and Master of Roadway of the Savannah, Florida & Western Ry., of the P.ant System, and during 1893-94 he was President of the Roadmasters' Association of America. He awarded a prize on an "Essay on Track Work" by the American Society of Railroad Superintendents in 1889.

Mr. Marcus Daly, President of the Butte, Anaconda Pacific Ry., died in New York City on Nov. 12. Mr. Daly was born in Ireland 58 years ago, and came to this country when 18 years of age. He began life as a miner in mines at Butte. Mont., and later became the owner, Mr. J. B. Haggin, of the Anaconda property, which turned out to be an enormous copper producer. This was the beginning of Butte as a copper center, and Mr. Daly and his associates soon purchased all the mines that could be secured. The Butte, Anaconda & Pacific Ry. was built to convey the products of the mines

Lieut. Francis J. Haeseler, U. S. N., and ordnance ex pert, died of typhoid fever at the Navai Hospitai in Brook-lyn, on Nov. 20. Mr. Haeseler entered the Navai Academy, as a cadet from Pennsylvania, on June 24, 1876, and was graduated on June 22, 1882. In 1885, after considerable sea service, he was assigned to the Naval Academy as an instructor. During the Spanish-American War he was stationed on the battleship "Texas," and soon became known in the service as an expert in heavy ordnance and electricity. He invented several useful appliances in this connection, including an electrical attachment for insuring the closing of the breech-block before firing; improvements in loading 12-in. guns in any position and thus increasing rapidity of fire; the Haeseler rock-drill, etc.

ENGINEERING SOCIETIES.

COMING MEETINGS.

COMING MEETINGS.

FRANKLIN INSTITUTE.

NOV. 25. Stated meeting of the Physical Section. Secy.,
Wm. H. Wahl, 10 S. Seventh St., Philadelphia, Pa.,
MERICAN SOCIETY OF MECHANICAL ENGINERIES.
Dec. 4 to 7. Annual convention in New York city.
Secy., F. R. Hutton, 12 West 31st St., New York city.
WESTERN SOCIETY OF ENGINEERS.
Dec. 5. Papers: "Construction of the Chicago & Galena
R. R.," by John E. Blunt; "The Design and Reconstruction of a Portion of the Glasgow Superstructure,"
by H. P. Boardman; "Rail Top Culverts," by Albert
Reichmann. Secy., Nelson L. Litten, 1735 Monadnock
Biock, Chicago, Ili.

CHICAGO ELECTRICAL ASSOCIATION.
Dec. 7. Paper by Charies Wirt. Secy., R. H. Schuchardt, 139 Adams St., Chicago, Ili.

NEW YORK RAILROAD CLUB .- At the meeting held on Nov. 15 a general discussion was held upon the tion, "Are six-coupled locomotives necessary for that run 100 miles or more between stops?"

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. The list of candidates for membership to be voted for prior to the coming annual meeting of the society shows a total of 51 candidates for full membership, 9 for associates and 41 for juniors, or 101 in all.

At the junior meeting held on Nov. 13 a paper upon "The Law of Construction Contracts" was read by Mr. John C. Wait, M. Am. Soc. C. E. The paper treated the point involved in the making and fulfilling of contracts and the preparing of specifications.

ROADMASTERS' AND MAINTENANCE OF WAY AS-SOCIATION .- At the annual meeting of the Roadmasters Association of America, held at Los Angeles, Cal., Nov. 13 to 15, the name was changed as above. The following officers were elected: President, J. M. Meade, Resident Engineer, A., T. & S. F. Ry.; Vice-Presidents, C. McEnery, B., C. R. & N. Ry., and George E. Hayward, C., St. P., M. & O. Ry.; Member of Executive Committee, M Sullivan, Mich. Cen. R. R.; Secretary and Treasurer, John B. Dickson, C. & N. W. Ry., Sterling, Ill. The next meeting will be held at Washington, D. C., in 1901.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. -The papers to be read at the coming annual meeting, Dec. 5 to 7, are as follows: "Comparison of Rules for Cal-culating the Strength of Steam Boilers," by H. de B. "A Record of the Early Period of High Speed Parsons; A Record of the barry Person of Figure Speak Engineering," by Chas. T. Porter, "Steam Engine of Maximum Simplicity and of Highest Thermal Efficiency," by Robt. H. Thurston; "Note on Centrifugal Fans for Cupolas and Forges," by Wm. Sangster; "Power Plant of the Massachusetts General Hospital," by F. W. Dean; "The Construction of Contracts," by Reginald P. Bolton;
"An American Central Valve Engine," by E. T. Adams; Mechanical Integrator Used in Connection with a Spring Dynamometer," by Max H. Wickhorst; "Apparatus for Dynamically Testing Steam Engine Indicators," by Carleton A. Read: "Tests of the Boilers of the Purdue Locomotive," by W. F. M. Goss; "A New Recording Air Py-rometer," by W. H. Bristol; "Comparative Value of Different Arrangements of Suction Air Chambers on Pumps, by F. Meriam Wheeler; "Tests of Centrifugal Pumps," b W. B. Gregory: "Hardness, or the Workability of Metals, by Wm. J. Keep; "New Principle of Gas Engine Design," by Chas. E. Sargent; "Heat Efficiency of the Gas Engine as Modified by Point of Ignition," by C. V. Kerr; "Power and Light for the Machine Shop and Foundry," by Forrest

NEW PUBLICATIONS.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1888-99.—Vol. 1. Washington, D. C. Cloth; 6 x 9 ins.; pp. xcii.-1,248.

Contents:—Commissioner's Introduction: Statistics of State Common-School Systems; Education in Great Brit-

ain and Ireland, in Australia, in Belgium, in Central Europe, and in Sweden; State Education in Japan; Classifi-cation and Promotion of Pupils; The Development of the Common School in the Western States, from 1830 to 1895; The Royal Normal College for the Blind, London; Minor Mental Abnormalities in Children as Occasioned by Cortain Erroneous School Methods; Miscellaneous Educational Tanin Erroneous School and Literature in Schools; The Study of Art and Literature in Schools; The Western Literary Institute and College of Professional Teachers; The U. S. Naval Academy, its Organization and Methods of Training; Notes on the History of American Text-Books on Arithmetic; Public Education in Italy and its Reform; Educational Training in Railway Service; University Extension in Great Britain; St. Louis Public

School System in 1880; School Gardens; Education in France; Confederate Text-Books, 1861-65; List of Educa-tional Periodicals in the United States; Educational Directory; Applied or Economic Geography; Swedish Gymnastics; The Future of the Colored Races.

MICHIGAN HEALTH CONFERENCE.—Fourth General Conference of the Health Officers in Michigan, Grand Rapids, Oct. 26 and 27, 1899. Lansing: State Board of Health. Paper; 6 × 9 ins.; pp. 181; illustrated. Sent free on receipt of 6 cts. postage.

Sent free on receipt of 6 cts. postage.

Many phases of health work are discussed at these conferences. Among the papers read at this conference were the following: "The Relation of Sewerage and Water Supply," by H. E. Riggs, M. Am. Soc. C. E., Toledo, O.; discussion on same by John W. Alvord, M. Am. Soc. C. E., Chicago. "Michigan Water Supplies," by Prof. Gardner A. Williams, M. Am. Soc. C. E., Cornell University. "Water Supply," by Samuel M. Gray, M. Am. Soc. C. E., New York city. "Recent Progress in Water Purification," by Geo. W. Fuller, Assoc. M. Am. Soc. C. E., New York city.

ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.

—Fifteenth Annual Report, 1900. Published by the Society; Prof. M. S. Ketchum, Secretary, Champaign, Ill. Paper; 6 × 9 ins.; pp. 195; Illustrated. 50 cts.

Contents:—Procedings: Some Uses of the Steam Indicator, E. E. Johnson; Notes on the Steam Indicator, D. W.

Meade; A State Municipal Works Commission, C. C. Brown; The Commercial Engineer, M. S. Ketchum; Recent Decisions of Interest to Civil Engineers, W. C. Holbrook; Landmarks, J. F. Schmeltzer; Cross Sections and Width of Public Highways; Concrete vs. Stone Masonry for Bridge Piers and Abutments, J. H. Burnham; Economic Railways for Country Districts, E. E. R. Tratman; Education in Railway Engineering at the University of Illi-nois, E. C. Schmidt; Improvement Work on the Illinois Central in 1890, W. E. Angier; Construction of the St. Louis, Peoria & Northern R. R., F. G. Jonah: Impre Work on the Chicago, Burlington & Quincy R. R. in E. P. Chapin; Municipal Ownership of Combined Water-Works and Electric Light Plant, L. E. Fischer Garbage Collection and Disposal at Moline, Ill., Ed. Kit-te.sen; Construction of Kewanee Sewerage System, G. C. Quade; Reports of Committees on surveying, paving-brick tests, water-works, drainage, etc., and discus

GEOLOGICAL SURVEY OF NEW JERSEY.—Report f. 1899. John C. Smock, State Geologist. Boards; 6 x ins.; pp. 185 + 327; illustrations and tables. Trento N. J.: State Geologist. 22 cts. for postage.

The annual report proper, or that portion relating to the work of the year, contains a continuation of the records and study of the artesian wells of the state, by Mr. Lewis Woolman, and a preliminary report on the chlorine contents of the normal waters of the state, by Wm. S. Myers. The chlorine studies, it is expected, will soon be sufficiently advanced to permit the publication of an isochloral map of New Jersey, like those already pre-pared for Massachusetts and Connecticut, by their respec-tive State Boards of Health, and like that of Long Island, prepared at the Mt. Prospect Laboratory of the Brooklyn water-works. Besides the topics mentioned, the main re-port contains descriptions of geological formations and the status of the mining industry of New Jersey, and a brief but interesting section by Mr. C. C. Vermeule, on "Th Reclamation of the Hackensack and Newark Meadows. A large part of the volume is devoted to a "Report on Forests," divided as follows: "The Forests of New Jersey," including a discussion on the relation between forests and water supply and forests and climate, by Mr. Vermeule; "The Relation Between Forests and Geology," by Arthur Hollick; "The Role of Insects in the Forest," by John B. Smith; and "Forestal Conditions and Silvicultural Prospects of the Coastal Plain of New Jersey, on Gifford. Included in the first section named, credited Mr. Vermeule, are papers by Mr. Gifford Pinchot on "Effect of Fire on Forest Production," and some other topics. It may be seen from the above outline, this is an unusually interesting and valuable report.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recomended by all the principal engineering societies of the United tates are: 3\(\pmu\epsilon\) (x9 ins., and 9x12 ins.)

HAND-CHAIN AND BUCKET PUMPS.—St. Joseph Pump & Mfg. Co., St. Joseph, Mo. Paper; 6 x 9 ins; pp. 32; illustrated.

PIPE-TAPPING MACHINES.—Lennox Machine Co., Mar-shalltown, Ia. Paper; 3×6 ins.; pp. 16; illustrated. This little pamphlet describes the Lennox pipe-tapping machine and accessories.

WIRE FENCE.—Missouri Anchor Fence Co., St. Joseph, Mo. Paper; 9 × 6 ins.; pp. not given; illustrated. The anchor clamp for fastening the cross wires and the automatic ratchet for tightening the fence are special

features of the fence produced by this company SHELF-BOX FOR STORES.—Charles P. Moore, Ravenswood, W. Va. Paper; 6 x 9 ins.; pp. 16; illustrated.
Shows single and compartment boxes of many styles,

intended for storing hardware, etc., on the shelves of an establishment. Full details and prices are given.

CORRESPONDENCE SCHOOL.—National Correspondence
Institute, Washington, D. C. Paper, oblong; 9½ × 6
ins.; pp. 48; illustrated.
Sets forth the methods, departments of instruction,
faculty, etc., of this institute, now in successful operation

for five years. Instruction covers bookkeeping and busi-ness, shorthand, civil service examinations, engineering, ness, shorthand, civil service examinations, engineering journalism and science.

WIRE ROPE.—Broderick & Bascom Rope Co., St. Louis, Mo. Paper; 6 × 9 ins.; pp. 96; illustrated.

This is a catalogue and price-list of iron and sheet wire e, hemp rope, pulley blocks, etc.

LIME.—Charles Warner Co., Wilmington, Del. Paper; 6×9 ins.; pp. 16; illustrated. This pamphlet describes the quarries and works of the Cedar Hollow Lime Co., and gives some details of tests, etc.

CAR PUSHERS.—Pearson Jack Co., Boston, Mass.; folder; 6 x 9 ins.; pp. 2; illustrated.

This folder illustrates the U. S. Car Pusher, formerly

made by the U. S. Car Moving Device Co., and now owned by the company named above.

VALVES.—Vincent Valve Co., Owosso, Mich. Sweet & Doyle, Cohoes, N. Y., Selling Agents. Paper; 6 x 3 ins.; pp. not given; illustrated.

A line of Vincent adjustable wedge straightway valves

is described in this catalogue.

ANTOMATIC FLUSHTANKS.—The De La Hunt Flush-tank Co., Cedar Rapids, Ia. Paper; 3x6ins.; pp. 13; illustrated. The claims of this automatic siphon are set forth in an

interesting manner, and prices and testimonials are given. STEEL SHELF BOXES.—The W. C. Heller & Co., Montclair, N. J. Paper; 6 x 9 ins.; pp. 16; illustrated.

This pamphlet illustrates and describes the steel shelf box made by the company named for storing small hard-ware in retail hardware stores.

STEAM PUMPS.—American Steam Pump Co., Battle Creek, Mich. Paper; $5\frac{1}{2}\times9$ ins.; pp. 4; illustrated. This pamphiet contains a reprint of a patent suit decided in favor of this company by the U. S. Circuit Court of

PIPE.—Pancoast & Rogers, 28 Platt St., New York city. Paper; 3 × 6 ins.; 2 folders.

One of these folders gives a variety of useful tables re-ating to cast-iron pipe and the other is a descriptive pricelist of wrought-iron pipe and boiler tubes.

SCHOOL OF CIVIL ENGINEERING.—Internation respondence Schools, Scranton, Pa. Paper; 6

This catalogue covers the civil engineering course in the above-named institution. Mr. Benjamin F. La Rue, C.E., is the principal.

WELL, MACHINERY AND SUPPLIES.—St. Louis Well Machine & Tool Co., So. Newstead Ave. and Wabash Track, St. Louis, Mo. Paper; 5 x 8 ins.; pp. 58; ilius-trated.

About everything needed in sinking wells seems to be included in this catalogue.

CEMENT PIPE AND CHIMNEY TOPS.—Detroit Cement Sewer Pipe Co., 256 Dragoon Ave., Detroit, Mich. Paper; pp. 4; illustrated. Besides making and selling cement pipe and other sim-ilar goods, this concern deals in vitrified clay pipe, cem-

ents and other contractor's supplies.

PUMPING ENGINES.—Worthington Pumping Engine Co. 120 Liberty St., New York city. Paper; 8×5 ins.; pp 48; illustrated. This is a souvenir catalogue for the Paris Exposition,

made up chiefly of illustrations and a list of the various branch offices of the company, throughout the world.

ENGINEERING AND SURVEYING INSTRUMENTS.—
Stackpole & Brother, 41 Fulton St., New York city.
Paper; 4½ x 6 ins.; pp. 27; illustrated.
The catalogue of this firm, established in 1851, describes and prices the various engineering and surveying instru-

ments made by it.

ORNAMENTAL IRON WORK.—Hecia Iron Works, Brooklyn, N. Y. Paper; 14 x 11 ins.; 61 page plates. This publication contains a large number of illustrations of ornamental iron work, grills, elevator enclosures, stair-way railings, gable facias, fences and gates, garden and lawn vases, etc.

OFFAL PRESSES AND DRIERS.—Davenport Found Machine Co., Davenport, Ia. Paper; 6 x 9 ins.; pp illustrated.

These presses and driers operate on the continuous plan and are designed for pressing the refuse from corn, cane and grains in glucose, starch and sugar factories and

VALVE-FACING TOOLS AND VALVE BALLS
Draper's Sons, Port Huron, Mich., and Petrolea,
ada. Paper; 4 × 5 ins.; pp. 24; illustrated.

These tools are designed particularly for repairing and efacing valves. The company also supplies brass valve refacing valves. The company also supplies brass valve disks and balls, the latter either solid or hollow, made by special lathes.

VATER-WORKS SPECIALTIES AND CAST-IRON GOODS.—John C, Kupferle, Second and Mound Sts., St. Louis, Mo. Paper; 6 × 9 ins.; pp. 70; Illustrated. Fire and yard hydrants, street washers, stop and waste WATER-WORKS

valves, lawn sprinklers, cast-iron sinks and accessories, water closets and parts of same are among the many things to which this pamphlet is devoted.

EXPLOSIVES.—Arthur Kirk & Son Co., 910 Duquesno Way, Pittsburg, Pa. Paper; 3% x 5% ins.; pp. 16; illustrated.

In this little book we have a brief description of various explosives and are told how to use them for a variety of urposes; included are the appliances used in this con-

ELECTRIC LOCOMOTIVES.—C. W. Hunt Co., 45 Broadway, New York city. Paper; 6½ x 9¼ ins.; pp. 6.

way, New York city. Paper; 6½ x 0¼ ins.; pp. 6; illustrated.

These locomotives are especially designed for use on light railways, in shops, foundries, lumber-yards, etc. Their advantages, cost of operation, limitations, etc., are fully discussed.

STEAM PUMPS.—A. S. Cameron Steam Pump Works, of E. 23d St., New York city. Stiff paper; 6 x 8 in pp. 112; illustrated.

Steam pumps of various classes and for many difference of the control of the cont

purposes are described in this catalogue, including a li of vacuum pumps. There are also a number of use tables at the end of the catalogue.

ROLLING SHELF LADDER.—John Calander, 148 E. St., St. Paul, Minn. Paper; 4% x 7% ins.; pp. illustrated.

We have here described, illustrated and priced in hibradt rolling shelf, or rolling stepladder, now in a for over 13 years in stores and business bouses. Vari forms of ladder and track are described.

FIRE-BRICK.—Ostrander Fire-Brick Co., Troy, N. Y., an 120 Liberty St., New York city: Paper; S½ × 5½ in pp. 30; Illustrated. This company mines its own fire-clay, fire-sand an

kaolin, and manufactures fire-brick for furnaces, gas-works, boiler setting, arch work, rolling mills, stoves and ovens, special tiles, locomotive arch-blocks, etc.

INDUSTRIAL FILTRATION.—The Maignen Filtration Co., 1310 Arch St., Philadelphia, Pa. Paper; 9 x 1: ins.; pp. 3; illustrated.

In this system of filtration the water first passes up wards through a preliminary filter, or scrubber, the downwards through a sand filter bed. Both beds may be washed by reversing the flow. The scrubber is designed displace settling reservoirs.

CRUSHED HARD LIMESTONE.—Charles Warner Co. Wilmington, Del. Paper; 6 × 9 ins.; pp. 19; illustrated Although intended primarily to sell the Cedar Hollow crushed limestone, most of the text of this pamphlet is devoted to discussions of macadam and telford roads, selected from various authors. The stone sold by the company is of the same character as that used in making its Cedar Hollow lime.

PUMPS AND HYDRAULIC MACHINERY.—The Goulds Manufacturing Co., Seneca Falls, N. Y. Cloth; 8 x 7 ins.; pp. 344; illustrated. Besides "pumps for every service," as the company describes a portion of its products, this catalogue includes pump supplies, well tools and a variety of plumbers' supites. Triplet-power pumps, it is hardly necessary to say, one of the specialties of this concern.

DRAWING MATERIALS AND ENGINEERING INSTRU-MENTS.—Keuffel & Esser Co., 127 Fulton St., New York city. Paper; 5% x 8% ins.; pp. 481; illustrated. 50 cts.

The 30th edition of this catalogue and price-list covers about everything in this line required by the draftsman, artist, engineer or pupil. Its contents cover such a wide range of materials that no well-regulated office can do without it.

RAILWAY SIGNALING AND INTERLOCKING APPLI-ANCES.—The Standard Railroad Signal Co., Troy, N. Y. Paper; 5½ x 7 ins.; pp. 217; illustrated. This is a reference book of interlocking and signaling

machines, devices and parts, manufactured by the com-pany named, which is intended especially for the use of railway men who find it necessary to refer in detail to these appliaces nfor the purpose of ordering repair parts machines.

IRON AND STEEL FLOOR PLATES, STEPS, Scully Steel & Iron Co., 130 Fulton St., Chica Paper; 4 x 9 ins.; pp. 12; illustrated.

This is a catalogue of wrought iron and steel plates for stairways, fire escapes, engine and boiler-room floors, locomotive running-boards, car platforms, vaults, etc. Some are ribbed and others have different forms o roughened surfaces. They are manufactured by the American Pressed Steel Co., of Philadelphia, Pa.

STREET BROOMS.—Improved Street Sweeper Co., Sixth Ave., Pittsburg, Pa. Paper; 3 x 5 ins.; pp. illustrated.

Push brooms of brass, rattan and flat steel wire are listed and priced and also machine brooms of split cane or hickory, of reed or rattan and of flat steel wire. The company also makes pick-up, gutter and aide sweepers, pavement scrapers, asphalt cleaners, sprinkling wagons. end and bottom dump wagons, dump and patrol carts,

SLIDE-CATCH RULING PEN.—Eugene Dietzgen Co., Chicago and New York. Paper; 5½ x 6½ ina.; pp. 4; illustrated.

This ruling-pen is so constructed that its elasticity tends to raise the lower blade sufficiently to permit of thorough cleaning. A slide-catch on the upper blade en-gages a head on the stem of the center adjusting wheel and keeps the pen closed when in use. The advantages claimed are simplicity, ease of operation and durability. The price ranges from \$1.95 to \$2.25.

MANILA AND HEMP ROPE.—Waterbury Rope C South Front St., New York city. Paper; 6½ × 9½ pp. 47; illustrated.

Describes the primitive and modern methods of rope-making, including an illustrated description of the Manila hemp plant and its preparation, and the Sisal hemp of Yucatan. The article on modern rope-making is especially interesting as showing the elaborate machinery now used for this purpose. Following this we have a lengthy price-list of rope and specialties made by the Water bury Co.

PLUMBERS', GAS AND STEAM FITTERS' SUPPLIES.—
N. O. Nelson Mfg. Co., St. Louis, Mo. Cloth; 5 x 8
ins.; pp. 648; illustrated.
STEAM GOODS.—N. O. Nelson Mfg. Co., St. Louis, Mo.
Paper; 5 x 8 ins.; pp. 249; illustrated.
These two catalogues include a very wide range of goods,
as may be seen from the fact that the company owns and

operates the following separate works: Brass, marble,

tanks and seats, bath tubs, pipe machine, soil pipe and sink works. In addition, it has lead works in its St. Louis headquarters, the other industries being scattered the country. over

NEERS' AND SURVEYORS' INSTRUMENTS.—C. Berger & Sons, successors to Buff & Berger, 9 Prov-Court, Boston, Mass. Boards; 6×9 ins.; pp. 212;

rated.

from describing the instruments made by this stablished manufactory, this publication, as usual, as a large amount of valuable instruction to the or and surveyor relating to the use of instruction to the care, adjustment, etc. The catalogue estynotes a number of new features infroduced in the earnments made. ongengi struments made.

later instruments made.

CASI-IRON CULVERTS, DRAINS, ETC.—Wm. A. Nichole, Girard Building, Philadelphia, Pa. Paper, oblong; 11/2 x 8/4 ins.; pp. 10; iliustrated.

This patent, portable culvert, drain or gutter crossing is built of steel or iron shapes or plates, of cast-iron, or of vitrified clay, etc., as may be desired. The purpose is provide a proper shape to give the heat service and of vitrined clay, etc., as hay be desired. The purpose is to provide a proper shape to give the best service and greatest safety against washouts. It has a wide, flaring mouth and outstretched wings; and is especially designed for use on railways, highways, trolley lines, etc. A large number of testimonials from prominent rallway companie and city officers attest to its practical value.

AUTOMATIC M. C. B. CAR COUPLERS.—The McConway & Torley Co., Pittsburg, Pa. Two books, cloth; 11½ × 9 lns., and 8½ x 12 lns.; pp. 74 and 99; illustrated. The first of these catalogues, which is printed in English, French, German and Russian, is designed for distribution at the Paris Exposition, and contains a brief history of the invention, development and present amount of the sof the various forms of M. C. B. coupling manufactured by the company named. The second catalogue contains illustrations and lists of parts of the various forms of Jauney couplers manufactured for passenger cars, freight cars and locomotives.

THE KENT MILL.—Kent Mill Co., New York, N. Y.
Paper; 6½ × 9½ ins.; pp. 24; illustrated.

The Kent mill is designed to pulverize stone, ores, cement and other hard substances. It consists of three rolls set with their axes parallel and at the apices of an equilateral triangle. Embracing these three rolls is a loose ring aganist the inner circumference of which the rolls are pressed by spring bearings for their axies. The ring and rolls are incased and the material is ground by passing between the rolls and the ring which revolve to-gether. This pamphlet describes the construction and operation of the mill in some detail.

STEAM SHOVELS.—Marion Steam Shovel Co., Marion, O. Leather; 9 × 6 ins.; pp. 144; illustrated. This is a handsomely printed and very complete illustrated catalogue of the various models of Barnhar; steam trated catalogue of the various models of Barmart steam shovels, ditchers, dredgers, ballast unloaders, etc., manu-factured by the company named above. The Barmart steam shovels and dredges are too familiar to engineers and contractors to require particular menion here, and all that needs to be said concerning the contents of this cata-logue is that they give full dimensions, sizes and capacity of machinery, lists of users, and a variety of other matter relating to their construction and operation.

STERILINE.—Andrew Howatson, Assoc. M. Inst. C. E., 88 Avenue de Neuilly, Neuilly, Paris, France. Paper; 10 x 12 ins.; pp. 4.

lox 12 ins.; pp. 4. Sterilize drinking water and swage effluents. It is said to be prepared from peroxide of chiorine (ClO₂), a gas produced by decomposing chlorate of potassium in suipnuric acid. This circular states that ats using this substance have been installed at Ostend, plants using this substance have been instance at Oscient, Belguim and Lectoure, France, to treat 1,250,000 and 20,000 gailons, respectively, of water per day; also that the cost of the process ranges from \$2.65 to \$3.30 per 1,000,000 gallons of water (presumably Imperial gallons). It appears, however, from the report of Dr. Oglar, a French chemist and bacteriologist, that to kill bacteria it is necessary that all suspended organic matter be removed be-fore the sternline is added.

SEWAGE PURIFICATION.—City Wastes Disposal Co., 874
Broadway, New York City. Paper; 4 × 1 ins.; pp. 7,
19, 15, 7.

19, 15, 7.

The first of these four pamphlets, "The Purification of Sewage by Wave Action on an Aerated Apron," seems to describe a combination of the septic tank and double lateral filtration, without exposure to light, in accordance with a system recently developed by the company. To the pamphlets appear to be supplementary to the first. The second one is an exposition of the "Principles of Bacterial Oxidation as Applied to the Purification of Sewage," and the third one is entitled "In Re. Chemical Precipitation." The latter consists of quotations brought together The latter consists of quotations brought together to show that chemical precipitation has had its day. The fourth pamphlet, "Suggestions for Sewerage Committees," is from "Sewerage and Land Drainage," by the late Geo. E. Waring, Jr.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Nov. Nov.	
Nov.	
Nov.	24. Steel for building, New York, N. Y Nov. 8
	24 Electrical machinery, Waverly, O Nov. 15
Now	24. School house, San Francisco, Cal
Nov.	24 Bridge superstructure Cleveland O Nov. 22
Nov.	26. Arc lights. Philadelphia. Pa
Nov.	26. Removing garbage, Parkersburg, W. Va Nov. 22
Nov.	26. Air pumping plant, Van Wert, O Nov. 22
Nov.	26. Head gate, Grand Junction, Colo Nov. 22
Nov.	26. Sceel viaduct, Atlanta, Ga 8
NOV.	26. Pipe sewer, Toledo, O
Nov.	26. Wooden bridge, St. Martine, Que Nov. 15
Nov.	26. Armory building, St. Thomas, Ont Nov. 15
NOV.	27. Pumping engine, Bridgeton, N. J
NOV.	27. Brick paving (10 streets), Cleveland, U. Nov. 8
NOY.	Advertised For Name New 1 to 22
Nov	27 Sea-going dredge Charleston S C Oct 18
2404.	Advertised Eng News Cet 18-25 Nov 8-15
Nov.	27. Curbing (18,400 ft.). Bessemer. Ala
Nov.	27. Fire engine house, Newark, N. J
Nov.	27. Electric supplies, Portsmouth, N. H Nov. 22
Nov.	28. Sewers, New York, N. Y
Nov.	28. School house, Seger, Okla. Ter
Nov.	28. Naphtha concessions, Baikan, Russia Oct. 25
Nov.	29. Fire home, Fremont, Neb
NOV.	30. Engine nouse, Allegneny, Pa
NOV.	30. Scaling ladders, San Francisco, CalOct. 25
Nov.	30 Pine valves etc Washington D C Nov 1
21011	Advertised, Eng. News, Nov. 1 to 22.
Nov.	30. Completing batteries, Key West, Fla Nov. 1
	Advertised, Eng. News, Nov. 1 to 22.
Nov.	30. Office building, New York, N. Y Nov. 8
_	Advertised, Eng. News, Nov. 8 to 22.
Dec.	1. Liectric lighting, Shreveport, La 8
Dec.	1. Coaling apparatus, Portsmouth, N. H Nov. 1
Dec.	1 Mascher building, Belle Center, O
Dec.	Advertised Engineering News Nov 15
Dec	1. Gas plant, Franklin, Ind.
Dec	1. Electric underground road, London, Eng., Nov. 15
Dec.	1. Pumping engines, Bay City, Tex Nov. 22
Dec.	1. Electric lighting, Narberth, Pa
Dec.	1. Steam heating system, Philadelphia, Pa Nov. 22
Dec.	2. Pridge (64.4) Halle Conference Mich
Dec.	3 Completing school New York M V New 201
Dec.	3. Water tower extension Blackwell's Island Nov 99
Dec.	3. Vault work, Washington, D. C. Nov. 22
Dec.	3. Wagon bridge, Billings, Mont
Dec.	3. Court house, Waco, TexOct. 25
Dec.	24. Steel for building, New York, N. Y. Nov. 8 24. Electrical machinery, Waverly, O. Nov. 15 24. School house, San Francisco, Cal. Nov. 22 24. Frie apparatus, Akron, O. Nov. 22 24. Frie apparatus, Akron, O. Nov. 22 24. Frie apparatus, Akron, O. Nov. 22 25. Are lights, Philadelphia, Pa. Nov. 22 26. Are jumping garbage, Parkersburg, W. Va. Nov. 22 26. Are pumping plant, Van Wert, O. Nov. 22 26. Are pumping plant, Van Wert, O. Nov. 22 26. Are pumping plant, Van Wert, O. Nov. 22 27. Sees vaduct, Atlanta, Ga. Nov. 82 28. Sees vaduct, Atlanta, Ga. Nov. 82 29. Sees vaduct, Atlanta, Ga. Nov. 15 28. Wooden bridge, St. Martine, Que. Nov. 15 28. Wooden bridge, St. Martine, Que. Nov. 15 27. Pumping engine, Bridgeton, N. J. Nov. 15 27. Pumping engine, Bridgeton, N. J. Nov. 15 27. Brick paving (10 streets), Cleveland, O. Nov. 1 27. Brick paving (10 streets), Cleveland, O. Nov. 1 28. Advertised, Eng. News, Nov. 1 to 22 27. Sea-going dredge, Charleston, S. C. Oct. 18 28. Advertised, Eng. News, Nov. 10 29. Zr. Fire engine house, Newsrk, N. J. Nov. 22 27. Fire engine house, Newsrk, N. J. Nov. 22 28. Sewers, New York, N. Y. Nov. 22 28. Sewers, New York, N. Y. Nov. 22 29. Napntha concessions, Baikan, Russia Oct. 25 20. Engine house, Allegheny, Pa. Nov. 22 20. Scaling ladders, San Francisco, Cal. Oct. 25 20. Port works, Recife (Rio), Brazil. Sept. 27 20. Pipe, valves, etc., Washington, D. C. Nov. 1 24. Advertised, Eng. News, Nov. 1 to 22 26. Office building, New York, N. Y. Nov. 8 27 28. Electric lighting, Shreveport, La. Nov. 1 29. Advertised, Eng. News, Nov. 1 to 22 20. Completing batteries, Key West, Fla. 21. Church building, Relle Center, O. Nov. 15 22. Advertised, Eng. News, Nov. 1 to 22 23. Completing shall, News, Nov. 1 to 22 24. Sietem heating system, Philadelphia, Pa. Nov. 22 25. Staem heating system, Philadelphia, Pa. Nov. 22 26. Steam heating system, Philadelphia, Pa. Nov. 22 27. Steam heating system, Philadelphia, Pa. Nov. 22 28. Steam heating system, Philadelphia, Pa. Nov. 22 29. Steam heating system, Philadelphia, Pa.
Dec.	3. Plans for city hall, Vicksburg, Miss Nov. 15
Dec.	3. Water-works, Pleasanton, Cal
Dec.	2 Over installations Chant Polsium Nov. 15
Dec.	3 Water-works Liberia Costa Rica Nov 8
Dec.	4 Church huilding Albany Ga. Nov. 15
Dec.	4. Mill building, Gonzales, Tex
Dec.	4. Hospital building, Washington, D. C Nov. 22
	Advertised, Engineering News, Nov. 22.
Dec.	4. Police barns (2), Cleveland, O
Dec.	4. Fire engine, Ottawa, Ont
Dec.	4. Police station, Brooklyn, N. Y
Dec.	Advertised Fire News New 22 and 20
Dog	4 Water tunnel New Haven Conn New 99
Dec.	Advertised Eng News Nov 22 and 29
Dec.	4. Water-works, etc., West Plains, Mo Nov. 22
	Advertised, Eng. News, Nov. 22 and 29.
Dec.	5. Brick paving, Birmingham, Ala
Dec.	5. Sewerage system, Whitesboro, N. Y Nov. 22
-	Advertised, Engineering News, Nov. 22.
Dec.	5. Court house addition, Atlanta, Ga Oct. 11
Dec.	6 Iron bridge Mankato Minn Nov 99
Dec.	6 Altering buildings Jeffersonville Ind Nev 22
Dec.	7 School house addition, Seattle, Wash Nov. 22
Dec.	7. County bridges, Plattsmouth, Neb
Dec.	7. Refrigerators, etc., Ellis Island, N. Y Nov. 22
Dec.	7. Sewers, St. Louis, Mo
Dec.	7. Constructing cruisers, Washington, D.C., Oct. 11
Dec.	7. Bridge, Townsend, Mont
Dec.	9. Workshop building Philadelphia Do Nov. 15
Dec.	8 Wharves Roston Mass Nov 15
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Dec.	8 State capitol building Jackson, Miss Oct. 25
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Dec 21 Steam heating schemes McWes Vision Ess Nov 15
Dec. 31. Steam heating schemes, Malling Union, Eng. Nov. 15 Jan. 2. Electric plant, Stavanger, Norway, Oct. 18
Jan. 9. Pumping engine, Melbourne, Victoria Sept. 20
Jan. 10. Court house, Linton, N. Dak
Jan. 12. Sewage pumping plant, Boston, MassOct. 11
Advertised, Eng. News, Oct. 11 and 18.
Jan. 16. Bridges (5), Chicago, Ill
Advertised, Engineering News, Nov. 22.
Jan. 28. Mining concessions, Russia Nov. 8
Feb. 1. Electric tramway, Calvados, FranceOct. 18
Feb. 15. Water supply, Grand Rapids, Mich Nov. 22
Advertised, Eng. News, Nov. 22 to Feb. 7.
Feb. 21. Powder works, rilo de Janeiro, Brazii Sept. 20
Mar. 1. Rice drying machinery, Novaro, Italy Sept. 27
Mar. 25. Sewerage system, Basford, Eng Sept. 13
Mar. 25. Water-works, Mondovi, WisOct. 25
May 10. Harbor improvements, Rosario, Argentina. Nov. 1
No date. Grading, St. Louis, Mo Nov. 8
Advertised, Eng. News, Nov. 8 to 22.
" . Water pipes (9 miles), Middlebury, Vt Nov. 15
Advertised, Engineering News, Nov. 15.
No date. Bridge superstructure, Fredericton, N. B. Nov. 22
" .Air compressors, Franklin, Ind
" .Irrigating canal, Houston, Tex
" .Levees (2), Houston, Tex

NOTICE TO READERS.—Although every possible effort is made to verify the reports of new construction before their publication in these columns, complete verification is not always possible. When it becomes necessary to publish news whose accuracy has not been verified, the words "according to reports," "if is stated," or other expressions of similar import are attached to the item. We will be obliged to our readers if they will send us prompt reports of any work in which they may be interested, and also to call our attention to any important errors that may be noticed in these columns, and give us the correct details. When writing to persons and companies mentioned in this department, our readers will confer a favor by mentioning Engineering News as the source of their information.

RAILWAYS

(For foreign railways see under "Foreign Contracts and Export News.")

(For foreign railways see under "Foreign Contracts and Export News.")

ALASKA.—R. O. Lazier, Engr., representing an English syndicate, has returned to Seattle, Wash., from Alaska, where he has been gathering data for the construction of a railway line to the new gold fields. Mr. Lazier's plans are said to be for a line from a point on Fort Clarence Bay across country to Council City, tapping the Bluescone district, with an extension to the Yukon River; also a line south to Nome and one in a northerly direction to the Kongarok Camp.

ALPENA, GAYLORD & WESTERN.—T. R. Goodburne, Secy., Detroit, Mich., writes that no official steps have been taken toward the construction of this line, except to authorize a preliminary survey. Promises have been received for the rights of way ever most the distance, which will be about 200 miles. Considerable stock has been soid, and the construction capital has been offered from various sources, but contracts will not be let until spring. It is preposed to use a third-rail electric system for light traffic and steam for freighting. The route will be from Alpena, Mich., westward to Hillman, thence to Atlanta, branch will be built to Traverse City and Frankfort. Laster, Nov. 18, Wm. M. Durand, Pres., Alpena, Mich., writes that proposals are now being received for constructing the line. Mr. Durand states that the line will be 175 miles in length. W. H. Le Roy, Ch. Engr., Alpena.

BALTIMORE & OHIO.—A contract is reported to have been closed with the Electric Storage Battery Co. of Philadelphia, for a storage battery to assist in hauling freight trains through the belt tunnel at Baltimore, Md., by electricity. The battery will consist of 320 tanks, each holding 30 plates, 19 negative and 20 positive, and will have a capacity of 1,200 HP.—It is stated that the company's engineers are surveying for an additional track at Weverton, Md., to extend to Engle's Switch, a distance of six miles. The tunnel at Harper's Ferry will be removed and a new interlocking switch system will be installed.

O., via Rising Sun, Ind., to Louisville. The proposed road will be about 100 miles in length. G. N. Kittredge, Ch. Engr., Cincinnatt.

COOPER RANGE.—R. T. McKeever, Gen. Mgr., Houghton, Mich., is reported as stating that the construction of the extension from the main line to Painesday, Mich., where the Champion mine is located, is being rapidly pushed, and will be completed by Dec. I. The line will be about six miles in length, including the line to the mine. Considerable side tracking will be needed on a spur to the Tri-Mountain mines. The spurs are being built with 75-lb. rails.

DENVER & RIO GRANDE.—E. T. Jeffery, Pres., Denver, Colo., states that the earnings of the company will be devoted to the improvement of equipment, track and extensions of the road. The gage of the Rio Grande Southern will be made standard to Antonio, and then from Monte Vista to Del Norte, and ultimately the whole Creede line. The Texas Creek line will be completed, but no other work will be undertaken this fall.

DES MOINES, IOWA FALLS & NORTHERN.—B. Schreiner, Ch. Engr., Iowa Falls, Ia., informs us that locations have been made from lowa Falls to Nevada, 38 miles, and contracts will soon be let for that section.

DULUTH, ST. CLOUD, GLENCOE & MANKATO.—An eastern construction company is said to have offered to construct this entire line from Albert Lea to Duluth, Minn., and to furnish the entire equipment, providing that the entire issue of all stock issued by the company be given to the contractors as compensation. The contractors offer to begin the construction within 60 days after the right of way have been secured between Albert Lea and Mankato, 55 miles. They propose to build the line, using 60-lb. T-rails, 2,640 ties to the mile.

EASTERN TEXAS.—Incorporated in Texas, with \$150,-000 capital stock, to build a railway from Lufkin to Crockett. R. H. Keith, W. C. Perry and D. A. Nunn are interested.

EL PASO, PECOS VALLEY & EASTERN.—The engineers who made the survey of this line, about 170 miles in length, report that 120 miles of the road will be through smooth, unbroken country.

The cost of grading and

bridging will be less than it was expected. The road will run from the state line on the El Paso & Northeastern R. R. to Lake Arthur. J. J. Hagerman, Colorado Springs, Colo., and A. R. Temple, Roswell, are interested.

FEDERAL CONSTRUCTION CO.—Dallas Willett, Pres. Morganfield, Ky., writes us that the capital for constructing the company's proposed line of 140 miles, extending from Memphis, Tenn., to West Point, Miss., is assured, and that everything is favorable for beginning operations in the spring.

in the spring.

10WA CENTRAL.—Howard G. Kelly, Ch. Engr., Marshalltown, Ia., informs us that the company has no intention of building a new line into Des Moines, Is. The directors of this company are reported to have authorized an expenditure of \$1,000,000 to place the property in first class condition.

class condition.

KANSAS & SOUTHERN.—H. A. Schwaneche, Ch. Engr.,
Westmoreland, Kan., writes us that the extension to be
built from Westmoreland through Myers Vailey, Louisville, Wanego and Alma, about 35 miles, has been surveyed, and rights of way are now being obtained. No
contracts have been awarded as yet, but will be let this
fall. Chas. 8. Wheeler, Pres., Westmoreland.

KENTUREY 15 to recorded that the Vicania Coal

point from Westmoreland through Myers Valley, Louisville, Wamego and Alma, about 35 miles, has been surveyed, and rights of way are now being obtained. No contracts have been awarded as yet, but will be let this fall. Chas. 8. Wheeler, Pres., Westmoreland.

KENTUCKY.—It is reported that the Virginia Coal, Coke & Iron Co., which owns the Middleboro furnaces and steel plant, will build a nafrow gage railway from Mary Mead to the Doe Mountain ore mines, 20 miles distant.

LITTLE ROCK NORTHERN.—S. E. Reaugh, Ch. Engr., Box 321, Little Rock, Ark., informs us that locations have been made from Little Rock, Ark., in the state line, and surveys are now under way from the state line, and surveys are now under way from the state line, and surveys are now under way from the state line, and surveys are now under way from the state line to Springfield, have the state line, and surveys are now under way from the state line to Springfield, have the state line, and surveys are now under way from the state line to Springfield, have the state line, and surveys have been made from Baton Rouge, La., through to Hammond, and a preliminary to Nicholson, La. Bids for the section between Baton Rouge and Hammond have been received, but the contract has not been awarded. The road will be 44 miles in length and will be a part of the illinois Central system. The Illinois Central R. R. will establish a new yard at Jackson, Miss., and the Yazoo & Mississippi Valley R. R., owned by the Illinois Central will locate a new yard and a 12-stall frame round house at Tchula, Miss.

MISOURI, KANSAS & TEXAS OF TEXAS.—S. B. Fisher, Ch. Engr., St. Louis, Mo., informs us that the work on the extension from San Marcos to San Antonio, Tozas, is progressing favorably, and the grading is well under way. Work is now where way on the construction of the plers of a bridge over the Guadalupe River, for which the superstructure, consisting of three 150-ft. deck spans and one 60-ft. girder span is being furnished by the Ponnished by the council to consider the pro

Albany R. R.

NEW YORK, NEW HAVEN & HARTFORD.—It is reported that the Harlem River branch will make a four-rack system of the line between New Rochelle, N. Y., and Harlem River. The work has been under consideration for some time. C. M. Ingersoll, Jr., Ch. Engr., New Haven, Conn.

(MANA & MORNAGE ST.)

OMAHA & FREMONT.—Incorporated in Nebraska, with 8750,000 capital stock, to build and operate a railway. I. Noyes, O. A. Wolcott and V. O. Strickler, of Omaha, Neb., are interested.

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PITTSBURG, CONNELSVILLE & WHEELING.—The construction of this line was started on Nov. 15. Kägar Holmes. Gen. Mgr., states that the road will cost between \$8,500,000 and \$4,000,000, and that fully as large a sum will be spent in buying coal lands in Marshall and Greene counties, Pa. The contractors are Miller Construction Co., Lock Haven, Pa.; A. M. Jolly & Co., Pittsburg; Chas. A. Sims, Philadelphia, and E. H. Post, Wilkesbarre, Pa.

PITTSBURG & WESTERN.—Bids are wanted for 250,-000 cross ties and 100 sets of switch ties, according to reports. R. Finney, Pur. Agt., Allegheny, Pa.

ROCKAWAY VALLEY.—It is stated that this road is to be extended from New Germantown, N. J., to Stanhope, where a connection will be made with the Lehigh Valley R. R. The work of laying out the route has aiready been started. Chas. L. Jacobus, Pres., 37 Wall St., New York.

ST. LOUIS & SAN FRANCISCO.—Reports state that a branch will be built from Springfield to Chadwick, Mo., to connect with the branch to Eureka Springs, Ark. F. W. Bond, Ch. Engr., St. Louis.——It is also stated that the company will acquire control of the Arkansas & Oklahoma line, now building. The road will be about 50 miles in length, extending from Rogers, Ark., to Groves, Ind.

Ter. About 40 miles of the road has been completed, and the remaining ten miles is graded. The road was planned to develop the local section, which is rich in agricultural products, and will secure an entry into St. Louis by becoming a part of this system. J. M. Bayliss, Cassville, Mo., and J. Foelker, Rogers, Ark., are the chief promoters of the road.—Lantry Bros., contractors, Strong City, Kan., are said to have received a contract for ballasting the company's track through Western Missouri and the Indian Territory, and for the construction of a

line from Springfield, Mo., to Little Rock, Ark. The new line will tap the zinc fields of Marion county. The cost of the entire work is said to be about \$2,000,000.

SOUTHERN.—It is stated that about \$600,000 will be expended on improvements to the Knoxville division. The work will include the excavation of several thousand yards of earth. McArthur Bros. have a part of the contract.—Southern papers announce that extensive improvements are proposed to the company's property at Alexandria, Va. W. H. Wells, Civil Engr., Washington, D. C.

Alexandria, Va. W. H. Wells, Civil Engr., Washington, D. C.

TENNESSEE.—The Apalachian Land & Lumber Co., of Apalachia, N. C., is reported to have announced its intention of rebuilding the railway which it owns and of extending it into the timber lands for a distance of five miles. Rails have been purchased for the extension, and work is reported started. The company is also said to have plans for a tannie acid plant. W. W. Baggs, Supt. UNION PACIFIC.—The management of this company is said to have decided to appropriate \$15,000,000 for the construction work to be done next year. The work is to include, in addition to the cutoffs and improvements on the main line, two or three new branch lines.

WEST BRANCH VALLEY.—To be built from Clearfield to Kartiaus, Pa., about 115 miles. A. E. Patton, Pres., Curwensyille, Pa.; A. V. Hoyt, Ch. Engr., Philipsburg, Pa. Further information will be found under the New York Central & Hudson River, which will build the line.

STREET AND ELECTRIC RAILWAYS.

(For foreign street and electric railways see under "For-eign Contracts and Export News.")

eign Contracts and Export Newa.")

AUGUSTA, ME.—The question of granting a franchise for the electric railway from Augusta to Lewiston is now before the railroad commissioners. H. M. Heath is reported as stating that the engineer's report has been submitted to the commission. The road will be 27 miles in length and will run from this city through East Winthrop, Baileyville, Winthrop, North Monmouth, Monmouth Center to Lewiston. Heavy rails will be used in the construction. Albert H. Shaw, E. J. Lawrence, Augusta, and M. I. Masson, Brunswick, are interested.

NASHUA, N. H.—Local papers state that the selectmen of Hudson have granted the Hudson, Pelham & Salem St. Ry. Co. a franchise to build through that town, on which construction will be started at once. C. H. Burke, Pres., Pelham.

St. ALBANS, VT—It is started at the selectmen of the construction will be started at once.

Pelham.

ST. ALBANS, VT.—It is stated that the contract for building the electric road to St. Albans Bay has been let to the New England Electric R. R. Construction Co., and that operations will be started at once. A company will be organized to operate the road, and will be known as the St. Albans St. Ry. Co. It is obliged to complete the line within a year. A line to Swanton will be built eventually.

ine within a year. A line to Swanton will be built eventually.

BOSTON, MASS.—A charter has been granted to the Woburn & Goston St. Ry. Co. to build a line from the railway station in Woburn through Lexington and Arlington to Arlington Heights, about 5½ miles. The company is capitalized at \$75,000. F. C. Nicholas, E. F. Johnson and E. M. Southworth are interested.

BUFFALO, N. Y.—Rights of way are being secured for the electric railway to be built from Lakewood to Chautauqua, connecting at Lakewood with the Jamestown St. Ry., giving a continuous line from Jamestown to the Chautauqua assembly grounds, on which operations will be started in the spring.

GLENS FALLS, N. Y.—The board of trustees has granted a franchise to the Warren County R. R. to build through this place. Jos. A. Fowers, Lansingburgh, in interested.

through this place. Jos. A. Powers, Lansingburgh, in interested.

HASTINGS-ON-HUDSON, N. Y.—The board of trustees has granted the Yonkers R. R. Co. a franchise to build and operate an extension of its line on certain streets in this village. W. C. Callahghan, Supt., Yonkers.

PEEKSKILL, N. Y.—The Peekskill Lighting & Power Company has filed a mortgage for \$750,000 to enable it to make extensions to its lines in the northern part of the county and in Connecticut. They propose to extend its road from Peekskill to Brewster and thence to Danbury, Conn., where connection will be made with the lines running to New Haven and Greenwich. Another extension is planned from this city to Verplanck's Point and from there to Sing Sing, providing franchises can be obtained b. B. Nostrand, Jr., Mgr.

MERCHANTVILLE, N. J.—The Camden & Suburban Ry. Co. has petitioned the council for permission to build a double track in this place.

ALLENTOWN, PA.—The Lehigh Valley Traction Co. has purchased the Allentown & Slatington trolley line, 21 miles in length. The company has also acquired the State Belt trolley line, 17 miles long. The company's system will embrace about 110 miles, and it is stated that an extension will be built from Slatington to Mauch Chunk, a distance of 12 miles.

CHESTER, PA.—It is stated that the Philadelphia & Dalagar Parken P

a distance of 12 miles. CHESTER, PA.—It is stated that the Philadelphia & Delaware Ry. Co. and the Prospect St. Ry. Co. have been consolidated under the name of the Philadelphia & Chester Ry. Co., and that a contract has already been let for the building of a line, including drawbridges over Crum and Darby Creeks, and car and electrical machinery. A. C. Harrington, Baltimore, wil be General Manager of the line.

COLUMBIA, PA.—Wm. B. Given, Pres. Lancaster, Petersburg & Manhelm Electric Ry., informs us that the company has been chartered and a large amount of the stock subscriptions obtained, but nothing as yet done towards construction of its line which will be 11 miles in

towards construction of its line which will be 11 miles in length.

GERMANTOWN, PA.—The Union Traction Co. has submitted plans to the board of surveyors for ten miles of new line on various streets in this city.

HARRISBURG, PA.—The Glasgow R. R. Co. has been incorporated to build a railway in Ohio township, Beaver county, to be % of a mile in length; capital stock, \$7,500—The Lancaster, Willow St., Lampaburg & Strassburg Ry. Co. has been incorporated with \$150,000 capital stock, to build an electric line about 10 miles in length in Lancaster county. Amos Hollinger, Pres., Lancaster.—A company has been organized to build an electric line from this city to Linglestown. The road will be capitalized at \$6,000 per mile, and will be from eight to ten miles in length. Parts of the rights of way have already been secured. A summer resort will be located at Cohoe's Springs by the projectors, who propose fo begin operations in the spring. Dr. C. H. Smith, Pres., Linglestown; Geo. W. McIlhenny, Secy., Harrisburg, and J. S. Diffenderfer, Treas., Steelton.

PHILADELPHIA, PA.—We are informed that the Schuylkill Traction Co., of Girardville, is having surveys made for a branch from Ashland to Gordon, and to the Minera' Hospital, about three miles, and also for an extension from Shenandosh to St. Nicholas, about two miles.—The Shenandosh & Pottsville St. Ry. Co., of which Powell

Evans, 517 Arch St., is President, is surveying a road from Maiseville, on the Schuyikili Traction line, to Politaville, via Frackville and St. Clair, about 13 miles. The office of the Schuyikili Traction Co. is at 517 Arch St. Dallas Sanders, Pres.; F. P. Unger, Supt.

PARKERSBURG, W. VA.—The Parkersburg & Marietia Electric Ry. Co. has been incorporated to build an selectric railway between those towns, about 13 miles in secret callway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between those towns, about 13 miles in secret railway between the secret railway between the

completed. The company has already done a part of work.

DAYTON, O.—Robt. E. Kline, Ch. Engr., Athene N sonville & Hocking Valley Traction Co., Dayton, index us that all rights of way and franchises for the company in the state of the construction of made and negotiations are now under way for the unpit No contracts have been let. Mr. Kline desires to respond with contractors regarding the construction of road, which will be about 30 miles long, extend from Athens, through Chauncey, Nelsonville, Log Buchtel, New Floodwood, Doanville, Murray City, field, Jucksonville, Trimble, Glouster and Hollister. E. Biddison, Pres., Athens.

EAST LIVERPOOL, O.—A project is said to be on for build a street car line from this city to Hooksion Allen McDonaid is the chief promoter.

TOLEDO, O.—The Sandusky, Norwalk & Southern St., Albert of the company now operates electric line to Sandusky and Norwalk and has electric line to Sandusky and Norwalk and has cided to extend the line to Mansfield. John W. Hitwo Emil G. Schmidt and Wm. E. Guerin are interested.

TROY, O.—The Dayton & Troy Electric Ry. Co. whild a new power house near Tipp, according to report the building will be 100 x 110 ft. and 20 ft. in height of the company has been also been about \$100,000.

WABASH, IND.—The Wabash River Traction Co., Bled a bond in the sum of \$10,000.

The building will be 100 × 110 ft. and 20 ft. in height The plant will cost about \$100,000.

WABASH, IND.—The Wabash River Traction Co. has alied a bond in the sum of \$10,000, payable to the city of Wabash, should the company fail to have the Wabash. Peru Interurban Electric Ry. constructed before Aug. I. Robt. P. Woods, Engr., Wabash, with a corps of assistants, is engaged in making the location.

BENTON HARBOR, MICH.—Plans for the construction of an electric railway through the Michigan fruit district are now being considered by Chicago capitalists, headed by J. J. Sturm, a railway contractor. The plans contemplate several trolley lines to the principal cities and villages of the southwestern portion of the state. Some franchises have already been asked for.

SAGINAW, MICH.—The Saginaw Suburban Ry. has given an \$500,000 mortgage for a projected extension, according to reports.

CHICAGO, ILL.—The street railway commission has completed its street railway bill, which will make provision for the municipal control of street railways.—It is reported that a scheme is under consideration for the building of a subway system in this city, which will involve an expenditure of about \$50,000,000.

MILWAUKEE, WIS.—It is stated that the Milwaukee Ry. & Light Co. will expend about \$50,000,000.

MILWAUKEE, WIS.—It is stated that the Milwaukee Ry. & Light Co. will expend about \$2,000,000 in developing and improving its system. A new station and office building will be erected at a cost of \$500,000. The building will be second at a cost of \$500,000. The building will be about \$2,000 the will be made to the power house. John I. Beggs, Gen. Mgr.

Gen. Mgr.

WEYAUWEGA, WIS.—A. L. Hutchinson, Ch. Engr., Weyauwega, writes us that the preliminary survey for the Wisconsin Midland Ry, has been completed and that 75% of the rights of way have been secured. The capital is not yet secured. Contracts will be let as soon as bonds are placed. The road will be operated by electricity generated by water power, and will be about 70 miles in length. It will pass through eight important towns. W. C. Lawson, Press., Court House, Chicago, Ill.

DES MOINES, IA.—It is announced that eastern capitalists have organized for the purpose of building an electric road or compressed air railway out of Des Moines to a connection with the Iowa Central Ry, at Newton. L. M. Hanna and J. C. Rockefeller, Cleveland, are interested.

ested.

JUNCTION CITY, KAN.—H. H. Ziegler, Secy. the Electric Ry., Light & Ice Co., informs us that applications have been made for franchises and rights of way for the company's electric line, which will be 5 miles long, extending from Junction City to Fort Riley. The construction capital is now being secured. The company is also contemplating building an ice plant, an electric light plant and a cold storage plant.

ST. CHARLES, MO.—The council has granted the St. Louis, St. Charles & Western Ry. a franchise to build through the streets in this city. The construction of the line must be started before July 1, 1901, and be finished within a year.

SEDALIA, MO.—J. B. Quigley, Sedalla, is promoting a

line must be started before July 1, 1901, and be finished within a year.

SEDALIA, MO.—J. B. Quigley, Sedalia, is promoting a scheme to build an electric line east and west out of Newyord, Mo., to tap the coal and mineral districts. Eastern men are said to be interested. The Missouri Water, Light & Traction Co. will increase its capital from \$100,000 to \$1,000,000, and will operate the road, according to reports.

GUTHRIE, OKLA. TER.—A charter has been granted to the Oklahoma Telephone & Ry. Co. to build an electric railway and telegraph and telephone lines from Tecumsel in a southwesterly direction to Paul's Valley, Ind. Ter. thence to Roff, Stonewall and Coalgate; with a branch rom a point between Paul's Valley and Roff and extending south to Sulphur, where the line diverges, one branch going to Davis and the other to Hickory, making a total length of 125 miles. The cost of the line will be about \$500,000. The company also plans to erect electric light motor plants in the towns mentioned; also to furnish power for commercial use. The capital stock is \$1,000,000. J. J. McAlester, J. G. Harley, of South McAlester, Ind.; and Lewis E. Snyder, Oklahoma City, are interested.

SANTA FE, N. MEX.—J. P. Victory, attorney, informs us that contracts have been let for the ties and rails for the Santa Fe Ry. Co.'s electric line, which will be six miles in length, extending over the streets of the city. Geo. Nelson, Pres., Colorado Springs, Colo.; M. W. McGrath, Ch. Engr., Santa Fe.

LOS ANGELES, CAL.—D. N. Thomas has filed application with the couverill for a franchise to build an electric

LOS ANGELES, CAL.—D. N. Thomas has filed applica-tion with the council for a franchise to build an electric railway in certain sections of the city.

PENETANGUISHENE, ONT.—It is reported that a pany was incorporated some time ago to build an tric railway between this town and Midland, and that project is now being revived. C. Beek was the presiof the company.

ELECTRIC LIGHT AND POWER.

(For foreign electric light and power plants see under "Foreign Contracts and Export News.")

"Foreign Contracts and Export News.")

PORTSMOUTH, N. H.—Bids are asked until Nov. 27 for furnishing a quantity of wire and electrical supplies at the Navy Yard. A. S. Kenny, Paymaster Gen., U. S. N., Washington, D. C.

PAWTUCKET, R. I.—Press reports state that the council is considering the question of issuing \$100,000 in bonds for creeting a plant.

SLATERSVILLE, R. I.—Reports state that the Slaters-ville Finishing Co. will erect an electric plant and furnish light for the streets.

RMON, N. Y.-Press reports state that R. J. Fair-will erect a plant in connection with his water

MORES.

MANHASSET, N. Y.—It is stated that the Arcadian Electric Light & Mfg. Co. has received permission from the supervisors of Nassau county to construct a pole line here and in Thomaston and Great Neck.

EAGLESMERE, PA.—W. Emery, of Williamsport, is said to be interested in a company which will erect a plant

here and in Thomaston and Great Neck.

EAGLESMERE, PA.—W. Emery, of Williamsport, is said to be interested in a company which will erect a plant here.

EASTON, PA.—The people of this city have voted against the proposed issue of \$30,000 in bonds for improving the electric plant.

IRWIN, PA.—The directors of the Irwin Electric & Power Co. are said to have decided to issue \$70,000 in bonds for improving and extending the plant. C. E. Taylor, Pres.; H. D. Hearshey, Mgr.

MONONGAHELA, PA.—H. J. Lohman, Arch., of Mc-Keesport, Pa., is said to have let the contract for a plant for the Anton Brewing Co. here to the Westinghouse Electric & Mfg. Co., Pittsburg.

NARBERTH, PA.—Bids are asked, according to reports, until Dec. 1, for lighting the streets for the year 1901. F. H. Hayes, Chn. Highway Com.

OIL CITY, PA.—Bids are asked until Dec. 17 for furnishing 104 arc lights for five years from July 1, 1901. P. C. Porter, Cik.

PHILADELPHIA, PA.—Bids are asked by the departinghus for the year 1901. A. L. English, Dir.

RED LION, PA.—The plant of the Red Lion Electric Light & Power Co. was recently destroyed by fire; loss about \$3,000. B. F. Zarfos, Pres.; J. B. Herrman, Mgr.

SELINS GROVE, PA.—The people of this town have voted to issue \$10,000 in bonds for erecting a municipal plant.

SIEGFRIED, PA.—The Siegfried Power Co. will receive bids in about a month for erecting its proposed plant, to cost about \$15,000. L. I. Fletcher, Engr.; H. S. Cavanaugh, Treas., Easton.

WILKESBARRE, PA.—Reports state that the council had decided to defer the question of municipal lighting until Jan. 15.

BALTIMORE, MD.—Press reports state that the Rouncil Jan. 18.

BALTIMORE, MD.—The board of awards is said to have appeared to the present plant and water-works.

BALTIMORE, MD.—The board of sards is said to have appeared to committee to secure plans, specifications, estimates, etc., for a municipal plant. Frank W. Miller, Cy. Treas.

SPARTA, S. C.—Press reports state that the Sparta Telephote Co. is considering then cuestion of erecting a li

SPARTA, S. C.—Press reports state that the Sparta Tele-phone Co. is considering the question of erecting a light-

ing plant.

SPARTANBURG, S. C.—We are informed that R. R. Haynes, of Henrietta county, will develop about 2,000 HP. and that about 10,000 HP. is being developed at Landsford, Lancaster county, both to be used for cotton

mills.

JONESBORO, GA.—The council has been asked to take steps looking toward the erection of a municipal plant.

JASPER, FLA.—A local company, composed of B. E. Lennard, C. W. Smith, W. H. Greene, and M. F. Home, has been granted permission to construct a plant, water works and an ice plant.

TAMPA, FLA.—Press reports state that a special election will be held Dee 18 to vote on the question of issuing \$250,000 in bonds for constructing a plant and waterworks.

works.

FLORENCE, ALA.—W. J. Salter, Supt. Florence Gas Light & Fuoi Co., is not yet ready to make contracts for electrical machinery, as it has not yet been granted a franchiar for its proposed electric plant.

GREENVILLE, ALA.—C. E. Hamilton, Mayor, writes us that no definite steps will be taken toward erecting the proposed municipal plant until the early part of next year.

Year.

PRATT CITY, ALA.—This city is considering the question of erecting a municipal plant, according to reports.

CROWLEY, LA.—The city has purchased the plant from Henry Widmer and will extend it.

MONROE, LA.—The council is said to be considering the question of constructing a plant and water-works.

NASHVILLE, TENN.—At the recent elections the people of this city voted to issue bonds for erecting a municipal plant.

ple of this city voted to issue bonds for erecting a municipal plant.

SPARTA, TENN.—We are informed that the Gainesboro Telephone Co. will receive bids at once for constructing a plant operated by steam, to have a capacity of 10 2,000-c. p. are and 500 16-c. p. incandescent lights.

CINCINNATI, O.—W. F. White, Gen. Mgr. Cincinnati Edison Electric Co., writes us that all contracts have been let for laying its conduits.

NORWALK, O.—At the recent election the proposition to issue bonds for erecting a plant was defeated, according to reports.

QUINCY, O.—Press reports state that Plank Bros. will install a plant for commercial lighting.

DETROIT, MICH.—The following contracts were let Nov. 13 by the lighting commission: Samuel F. Hodge & Co., one 800-HP. triple expansion engine complete, with foundation, similar to the five now in use, \$15,939; Stanley Mfg. Co., of Pittsfield, Mass., one 600-K-W. two-phase, direct-connected dynamo, one 40-K-W. 125-volt exciter for same and one 200-HP. induction motor, two-phase, including necessary switches and instruments, at \$19,965;

Western Electric Co., Chicago, Ill., for one 150-light are dynamo, 500 revolutions a minute, similar to the one now in use, at \$3,150.

NEW BALTIMORE, MICH.—On Dec. 20 the village clerk will sell \$2,000 in bonds for electric lighting purposes.

HARRISBURG, ILL.—Reports state that the bollers in the plant owned by J. F. Meixsell recently exploded and damaged the machinery, which will have to be replaced. T. Johnson, Ch. Engr.

DYERSVILLE, IA.—It is stated that the Dyersville Light & Water Co. will erect a plant and water-works, to cost about \$15,000. Jas. Armstrong and D. A. Gehrig are interested.

NEW LONDON, IA.—F. W. Hiles Mayor, writes us that

about \$15,000. Jas. Armstrong and D. A. Gehrig are interested.

NEW LONDON, IA.—F. W. Hiles, Mayor, writes us that the question of erecting a municipal plant will probably be voted on at the spring elections.

DULUTH, MINN.—Press reports state that F. W. Cappellan, of Minneapolls, is preparing plans for a street lighting system for this city, to cost about \$100,000.

LINCOLN, NEB.—The city engineer is said to be preparing estimates for a municipal plant, to be operated in connection with the Rice pumping station.

BRAYMER, MO.—This city is considering the question of erecting a plant and water-works, according to reports.

WEST PLAINS, MO.—Bids are asked by George H. Cobb, Cy. Cik., until Dec. 4 for erecting a plant and water-works, as stated in our advertising columns. H. G. Doly, Mayor; Owen Ford, Consult. Engr., 710 Security Bldg., St. Louis.

ARKADELPHIA, ARK.—The council is said to have granted a franchise to Albert Moore and others to erect a plant.

a plant.

DE QUEEN, ARK.—L. M. & W. M. Dunn are reported to have been granted a franchise for a plant.

GURDON, ARK.—E. A. Whitmore, Pres., Gurdon Gin & Mill Co., writes us that nothing will be done this year toward constructing the proposed plant and water-works.

DALLAS, TEX.—The council is said to have decided to issue \$50,000 in bonds for erecting a plant. Chester B. Davis, Engr., is said to be preparing plans.

SANTA FE, N. MEX.—The council has granted a franchise to W. M. McGrath and others of Denver, Colo., to erect a plant, water-works and a swerage system.

AYLMER, ONT.—On Dec. 3 a special election will be

erect a plant, water-works and a seworage system.

AYLMER, ONT.—On Dec. 3 a special election will be held to vote on the question of issuing \$18,000 to purchase and extent the plant owned by the Aylmer Electric & Mfg. Co.

BROCKVILLE, ONT.—The council will, it is stated, engage an engineer to report on the improvements needed by the gas and electric plants.

CAYUGA, ONT.—Press reports state that the council has engaged H. F. Strickland, of Toronto, to prepare plans for a municipal plant.

COLDWATER, ONT.—The council is considering the

plans for a municipal plant.

COLDWATER, ONT.—The council is considering the question of erecting a plant, according to reports.

INGERSOLL, ONT.—The council committee has recommended that bids be asked for the municipal lighting.

NIAGARA FALLS, ONT.—The government has granted this city permission to develop water power and erect a plant with a capacity of 100 HP.

nis city permission to develop water power and erect a plant with a capacity of 100 HP.

NEW COMPANIES.—National Sea Power Co., East Orange, N. J.; \$300,000; C. V. Childs, J. Mapletop, W. N. Smith.

Westmoreland Light, Heat & Power Co., Wilmington, E. E. Robbins, M. L. Painter, Greensburg, Pa. Citizens' Electric Co., Clinton, Ia.; \$15,000; E. S. Nixon, Titus Hincheliffe, W. W. Newman.

General Light & Power Co., Coroning, N. Y.; \$50,000; M. J. Hogan, T. J. Begley, T. F. Daley, L. H. Cohen. Coroning Heat, Light & Power Co., Coroning, N. Y.; \$50,000; William K. Archbald, Frank N. Waterman, New York; Paul T. Brady, Syracuse.

Covina Electric Co., Covina, Cal.; \$25,000; O. Anderson, H. M. Houser, Covina; J. W. Calvert, Aznsa.

Broad Albin Electric Co., Broad Albin, N. Y.; \$25,000; L. U. Shatter, Rockville Center, L. I.; Charles F. Lehmann, Smithtown, L. I.

Olney Electric Light & Power Co., Olney, Ill.; \$28,000; L. U. Shatter, Rockville Center, Co., Olney, Ill.; \$28,000; Lincoln, O. C. Sprinkle, S. W. Dickenson.

Liberty Electric Co., Marlon, Va.; \$10,000; S. B. Husselman, W. J. Dalton, Boston; C. H. Lewis, Wakefield; R. Berrenberg.

Bluff City Electric Light & Gas Co., Council Bluffs, Ia.;

Bieff City Electric Co., Madden, Mass.; \$100,000; S. B. Husselman, W. J. Dalton, Boston; C. H. Lewis, Wakefield; R. Berrenberg.

Bluff City Electric Light & Gas Co., Council Bluffs, Ia.; \$50,000; T. Brown, J. P. Greenshilds.

Sherburne Electric Light Co., Sherburne, Minn.; \$15,000; E. Brundage, Malta, Ill.; D. M. Reynolds, J. McGovern.

\$50,000; T. Brown, J. P. Greenshilds.
Sherburne Electric Light Co., Sherburne, Minn.; \$15,-000; E. Brundage, Malta, Ill.; D. M. Reynolds, J. McGovern.
Neely Electric Co., Washington, D. C.; \$50,000; F. C. Behrens, L. C. Brooks, C. H. Neely.
Washington Electric Light Co., Camden, N. J.; \$50,000; W. P. Billings, E. W. Mulligan, J. Flanigan.
Shamokin & Edgewood Light, Heat & Power Co., Shamokin, Pa.; \$30,000; M. H. Kulp, D. C. Kaseman, H. W. Shuman, W. J. Wiest.
American Lighting Co., Chicago, Ill.; \$20,000; W. C. Jones, K. H. Addington, W. D. Murphy, Jr.
Alden Electric Co., Chicago, Ill.; \$12,000; F. H. Alden, J. Schlesinger, J. Gelserowich.
Eagles Mere Light Co., Eagles Mere, Pa.; \$7,500; W. Emery, J. R. T. Ryan, Williamsport: B. G. Welch.
Heniskayua Power Co., New York, N. Y.; \$100,000; Ernest C. Brown, L. J. Montgomery, New York; W. A. Graves, Rexford Flats.
Lestershire Heights Water & Power Co., Binghamton, N. Y.; \$16,000; M. S. Squires, G. S. Ack.ey.
Hermosa Orange Co., Riverside, Cal.; to develop water power; \$100,000; E. A. Chase, F. M. Heath, B. B. Bush.
Venice Electric Light & Power Co., Venice, Ill.; \$40,000; G. A. Nelmann, F. Kohl.
Versailles Electric Co., Cersailles, Ky.; \$18,000; Edw. Gunster, C. E. Stegmeier.
City Lighting Co., Linton, Ind.; \$10,000; Henry C. Ulen, Jr., S. V. Perrott.
Bristol Light & Power Co., Bristol, Tenn.; \$25,000; E.
J. Sanford, B. L. Dulaney.
Thorntown Electric Light Co., Thorntown, Ind.; \$15,000; A. V. Hodgin, R. S. Ashe, Ralph Hamberger.
Apoleton City Water & Power Co., Appleton City, Mo.; \$3,000; J. B. Esger, Phil. Klein, E. M. King.
Fruitvale Light, Power & Heat Co., Fruitvale, Cal.; \$100,000; J. C. Hammell, A. N. Frost, J. H. W. Riley.
American Light, Power & Transportation Co., 161 Washington St., Newark, N. J.; \$1,000,000; Wm. A. Jones, E.
D. Conkillin, F. P. Crane.
Newburg Light, Heat & Power Co., Newburg, N. Y.; \$20,000; C. R. Guay, Sewickley; G. Thompson, E. E. Hamliton, J. M. Walker.

Hunterdon Water Power Co., Newark, N. J.; \$2,000; E. A. Day, Morristown; J. T. Congleton, Newark. Grimes Creek Electric Power Co., Camden, N. J.; \$100.000; H. Hoopes, T. G. Janney, W. F. Eldell. South Boston Electric Light & Power Co., South Boston, Va.; \$200,000; R. W. Lawson, R. S. Barbour, J. Stebbins, South Boston; E. Schaefer, Lynchburg.

BRIDGES

(For foreign bridge work see under "Foreign Contracts and Export News.")

AUGUSTA, ME.-Local papers state that R. H. Gardner contemplates rebuilding the bridge in the rear of the Oaklands.

BANGOR, ME.—The following bids have been received by the council for constructing a steel bridge over the Kenduskeag stream at Franklin St.:

	A. Plan B.
King Bridge Co., Cleveland, O\$7,7	47 \$9,500
A. &. P. Roberts Co., Philadelphia, Pa 7,7	
Berlin Iron Bridge Co., East Berlin, Conn. 7,3	9,075
Union Bridge Co., New York, N. Y 7,5	
New England Structural Co., Boston, Mass. 7,6	
Boston Bridge Works, Boston, Mass 7,5	25 9,688
Eastern Bridge & Structural Co., Worces-	
ter, Mass 7,6	50 9,215
Groton Bridge & Mfg. Co., Groton, N. Y 7,4	87 9,200

(Plan A provides for plank walks, plan B for concrete.) *Accepted.

*Accepted.

HANOVER, N. H.—Plans for a new iron bridge over the Slate Brook on the county road have been accepted. The structure will be 20 ft. in length. Wm. Henry, Road Agent, will have charge of the work.

BOSTON, MASS.—The Real Estate Exchange and Auction Board has petitioned the mayor for the widening of the draw of the Congress St. bridge from its present breadth, 43 ft., to at least 50 ft.

breadth, 43 ft., to at least 50 ft.

NORTH ADAMS, MASS.—Bids are wanted by the commissioner of public works until Dec. 11 for constructing the steel superstructure of a plate girder highway bridge at North Adams, according to plans and specifications on file at the office of the Engineering News Publishing Co., 220 Broadway, as stated in our advertising columns.

EAST HARTFORD, CONN.—A committee has been appointed to consider the advisability of replacing the covered wooden bridge in Burnside with a modern structure and to report on the same before Dec. 15.

HARTFORD, CONN.—The hearing on the climitation of the control of the co

HARTFORD, CONN.—The hearing on the elimination of grade crossings on the Highland division of the New York, New Haven & Hartford R. R. at Terryville, in the town of Plymouth, has been postponed until Nov. 26. At the meeting on Nov. 15 plans were presented by the railroad company which called for a bridge and the elevation of tracks at a cost of about \$33,490. This will necessitate the removal of 18,000 cu. yds. of gravel and the building of retaining walls.

ALBANY, N. Y.—The contracts for building a swing bridge at 23d St., Watervilet, were awarded on Nov. 7 by John N. Partridge, Supt. Pub. Wks., to the Owego Bridge Co., Owego, N. Y., at \$10,150 and \$13,147, respectively; advertised in Engineering News.

NEW YORK, N. Y.—Mayor Van Wyck has approved the ordinance passed by the municipal assembly authorizing the building of a bridge across the East River, over Blackwell's Island to the Borough of Queens.

NEW YORK, N. Y.—The council has granted permission to the Manhattan Ry, to build a bridge across 180th St.

SYRACUSE, N. Y.—The North Side Citizens' Associa-

to the Manhattan Ry. to build a bridge across 180th St. SYRACUSE, N. Y.—The North Side Citizens' Association is agitating the scheme to bridge the Oswego Canal at the foot of Butternut St.

HACKENSACK, N. J.—Local papers state that the board of freeholders have accepted the bid of F. R. Long & Co. and the Berlin Iron Bridge Co., jointly, at \$234,000, for the construction of the new bridge to be built over the Hackensack on the Paterson plank road, at Secaucus. The Hoboken & Paterson Traction Co., it is stated, will pay \$35,000 of the cost for permission to run its cars over it.

over it.

MAYS LANDING, N. J.—The county board of freeholders and the property owners at Chelsea Heights will equally divide the expense of a new bridge to be built across the Inside Thoroughfare, between Chelsea and Chelsea Heights, at a cost of about \$16,000, according to

PATERSON, N. J.—The board of aldermen are considering the proposition of building the proposed new bridge over the Passaic River at the foot of Van Houton St. The plans prepared for the structure call for a structure 1.060 ft. in length, with a 30-ft. roadway and 10-ft. sidewalks; estimated cost \$100,000.

SEABRIGHT, N. J.—John Guire, Dir. Bd. Chosen Freeholders, informs us that the plans presented by John M. Brady, 1 Union Square, New York, on Nov. 14, for constructing a drawbridge over the South Sbrewsbury River, were accepted by the board. (Advertised in Engineering News.)

JOHNSTOWN, PA.—The Pennsylvania R. R. has agreed to build and maintain a bridge over the Brownstown crossing, providing the city will build the approaches.

proaches.

PITTSBURG, PA.—The following bids were received by Geo. W. Wilson, Dir. Dept. Pub. Wks., on Nov. 15, for the construction of the Tenth St. bridge across the Monongabela River: McClintock-Marshall Construction Co., special shapes used for floor plates, \$308,000, with channels used for floor plates, \$308,000; Nelson & Buchanan, \$283,500 and \$255,700; C. L. Stroble, \$291,500 and \$260,500; Fort Pitt Bridge Co., \$255,717 and \$294,910; Jutte, Foley & Co., \$270,000 and \$270,000; American Bridge Co., \$279,000 and \$271,000; King Bridge Co., \$229,900 and \$304,000; Drake, Stratton & Co., \$315,000 and \$315,000. The bridge is to be completed by Nov. 1,000 and \$315,000. The bridge is to be completed by Nov. 1,001. It will be 1,420 ft. long, including approaches, 40 ft. wide, and 55 ft. long, the next longest span will be 200 ft. in length, and the free remaining spans will be 225 ft. each. The contract was awarded on Nov. 17 to Nelson & Buchanan, at \$255,700.

at \$255,700.

GREENWOOD, S. C.—Bids are asked until Nov. 30 for building a bridge over Little Cowhead Creek on the new cut road. J. M. Major, County Supervisor.

PENSACOLA, FLA.—It is stated that a new bridge will be erected on the new road from Ward's Mill to the Wilson road. Address County Commissioner Johnson.

HOLLY SPRINGS, MISS.—Bids are asked until Dec. 3 for building a 64-ft. treatle bridge on Road No. 87, according to reports. T. L. Bennett, Chn. Bd. Supervisors.

CHATTANOOGA, TENN.—The Chattanooga Electric Ry. Co. is said to have offered to repair the Oak St. bridge.

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CALIFORNIA, KY.—The following bids were received by Edward E. Ball, County Engr., Nov. 5, for constructing a 65-ft. span iron bridge over 12-mile Creek, advertised in Engineering News: Columbus Bridge Co., Columbus, O., \$1,292; Cincinnati Bridge Co., Cincinnati, O., \$1,149; Champion Bridge Co., Wilnington, O., \$1,212: Joliet Bridge Co., Joliet, Ill., \$1,200; Brackett Bridge Co., Cincinnati, O., \$1,142; Lafayette Bridge Co., Lafayette, Ind., \$1,199; New Castle Bridge Co., New Castle, Ind., \$1,288. CLEVELAND, O.—Bids are asked until Nov. 24 for re-

SALIBST, New Castle Bridge Co., New Castle, Ind., \$1,218. CLEVELAND, O.—Bids are asked until Nov. 24 for re-constructing the superstructure of the bridge at Winslow St., over the Erie R. R. tracks, according to reports. Walter P. Rice, Dir. Pub. Wks.—City Engineer Ritchie has estimated that \$5,000.000 will pay for the illumination of 57 of the principal grade crossings in this city. The city's share will be \$2,000.000, the steam railways', \$5, 000,000 and the street railways', \$1,000,0000. The work will require four years in completion.

000,000 and the street integral of the will require four years in completion.

INDIANAPOLIS, IND.—John McGregor, County Comr., is reported as stating that during the next year bridges will be asked by the commissioners for the crossing of College Ave. and of Alabama St. over Fall Creek, of Richmond St. over White River, and one on Broad Ripple St., over Fall Creek, and of another over White River. The first two will be of stone.

CHICAGO, ILL.—Bids are wanted by the board of trustees of the sanitary district of Chicago until Jan. 16 for constructing the substructure and superstructure of five

CHICAGO, ILL.—L. E. McGann, Comr. Pub. Wks., has awarded the contract for building the Clybourn Place bridge to Fitzsimons & Connell, at \$63,485. The bids were published in our issue of Nov. 15.

MANITOWOC, WIS.—It was voted recently to build a bridge across the river at State St. Work will be started this fall.

MILWAUKEE, WIS.—The time for submitting plans for the ornamentation of the new Grand Ave. bridge has been extended by the Milwaukee Architectural Club from Nov. 13 to Nov. 27.

13 to Nov. 27.

WATERTOWN, WIS.—Bids will soon be asked for the construction of a three-span steel bridge over the Rock River to replace the present truss bridge. The length will be about 170 ft., with an 18-ft. roadway and two ft. walks on either side. G. H. Stanchfield, Cy. Engr.

MANKATO, MINN.—Bids are wanted by the county commissioners until Dec. 6 for constructing an iron bridge across Blue Earth River, at Dodd's Ford, to cost \$5,000, according to reports.

according to reports.

PLATTSMOUTH, NEB.—Bids are asked until Dec. 7 for building all bridges that may be ordered for a period of one year beginning Jan. 1. Bids must be accompanied by plans and specifications and a certified check for \$500. James Robertson, County Clk.

HEARNE, TEX.—The Black Bridge, which spanned the Prasos River, has been washed away. Another structure will be built at once.

SEATTLE, WASH.—The Northwest Bridge Co. has been corporated with \$25,000 capital stock.

FREDERICTON, N. B.—Bids are wanted by the com-rissioner of works, according to reports, for building the superstructure of several bridges, and for reconstructing a bridge and two wharves.

BUILDINGS.

(For foreign building operations see under "Foreign Contracts and Export News.")

BOSTON, MASS.—Plans have been filed by Peabody & Stearns, 53 State St., for a 6-story brick warehouse, at Atlantic Ave. and Central Wharf, for the Central Wharf & West Dock Co.

BROOKLINE, MASS.—The council is said to be con-sidering the question of erecting a new high school build-ing to cost about \$100,000.

BROOKLINE, MASS.—The council is said to be considering the question of erecting a new high school building to cost about \$100,000.

SOUTH HADLEY, MASS.—George F. Newton, 930 Tremont Bidg., Boston, has prepared plans for the Mt. Holvoke College building here, to cost about \$50,000, according to reports.

FORT GREBLE, R. I.—The following bids were received Nov. 8 by Maj. H. P. Young, Q. M., U. S. A., Newport, for completing the construction of two single sets of officers' quarters, one electrician sergeants' quarters and one one-company barrack, the contract for which was let May 28, but later annulled: John W. Burrows, Fortland, Me., \$34,400; James W. Gillies, 67 Roseneath Ave., Newport, \$35,500; Friend & Maguire, 29 Walnut St., Newport, \$36,500; Orson F. Curtis, New Britain, Conn., \$37,250; W. H. Glover Co., 451 Main St., Rockland, Me., \$42,330.

BROOKLYN, N. Y.—The board of public improvements has authorised the appropriation of \$30,000 for repairs to the Boys' Training School.——It is stated that the Brooklyn Hotel Co. will soon start work on a 23-story brick hotel building at Willow and Clark Sts. H. C. Pelton, Arch., 1133 Broadway, New York.

BROOKLYN, N. Y.—Bids are asked by the police department, 300 Mulberry St., New York, until Dec. 4, for erection of a station house, prison and stable at Liberty and East New York Aves.——Frank Dobson, 218 East 42d St., New York submitted the lowest bid to the board of education, 59th St. and Park Ave.. New York, at \$17,790 on Nov. 19 for installing a heating plaint, etc., in public school No. 128.——P. Cavanaugh was low at \$9,438 for sanitary work in public school No. 123.—The following bids were received Nov. 19, by the board of education, 59th St. and Park Ave.. New York, at \$17,790 on Nov. 19 for installing a heating plaint, etc., in public school No. 128.—7b. Clouis Wechsler, St. James Bidg.. New York, \$148,-750; P. Cleary, \$150,785; Ruton. Kenny & Henningham, \$150,996; T. Cockerill & Son, \$148,-700; Luke A. Burke, 401 W. 59th St., New York, \$148,-750; P. Cleary, \$150

Wis., at the Pan-American Exposition.

BUFFALO, N. Y.—It is stated that the Eric R. R. will erect a new passenger station at Michigan and Exchange Sts., to cost about \$55,000; Chas. A. Brunn, Supt.—The executive committee of the Pan-American Exposition has let the contract for constructing 14 barns to Thompson, Hubman & Fisher, at \$24,678.

ITHACA, N. Y.—Press reports state that plans are being prepared for a new observatory building, to be erected here by Cornell College. Prof. E. A. Fuertes, Dir. C. E. College, may be addressed.

NEW YORK, N. Y.—Bids are asked until Nov. 24 for the steel work for building No. 22, 60 × 300 ft., at the Navy Yard. M. T. Endleott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

NEW YORK, N. Y.—The following bids were received Nov. 19 by the board of education, 39th St. and Park Ave., for erecting the Peter Cooper High School building: Louis Wechsier, St. Jemes Bidge, 4469, 385; H. M. Weed & Co., 2858 Droadway, 4497, 905; D. P. Mahony, 107 W. 46th St., 4497, 908; J. D. Murphy, 1181 Broadway, 4508, 000; Luke A. Burke, W. 59th St., 8517, 224; T. Cockerill & Son. 147 Co.umbus Ave., 8518, 304; P. J. Brennan, 6th Ave. and 22d St., 4503, 900; W. & T. Lamb., 99 Nassau St., 8521, 592. NEW YORK, N. Y.—Plans have been filed by the City & Suburban Homes Co., 281 Fourth Ave., for a 6-story brick tenement, 50 × 90 ft., at 213-215 West 62d St., to cost about \$30,000, Howells & Stokes, Archs., 47 Cedar St., by H. D. Baker, 141 Division St., for two 6-story brick fasts, 34 × 82 ft., at 747 to 751 East Fifth St., to cost about \$30,000, M. Bernstein, Arch., 245 Broadway; by Adolph Wexler, 1298 Webster Ave., for 12 4 and 5-story brick flats, 28 × 78 and 28 × 98 ft., at Webster Ave., and 168th St., to cost about \$40,000, M. Bernstein, Arch., 245 Broadway; by Adolph Wexler, 1298 Webster Ave., for 12 4 and 5-story brick flats, 28 × 78 and 28 × 98 ft., at Webster Ave., and 168th St., to cost about \$40,000, J. C. Cocker, Arch., 234 East 88th St.; by S. Michelbacher, Hotel Grenoble, for a 7-story brick flat, 35 × 92 ft., at 227 East 72d St., to cost about \$45,000. E. L. Angell, Arch., 21 Park Row; by the City of New York, for a 3-story brick and stone schoolhouse, 140 × 61 ft., at Fox and 167th St., to cost about \$35,000. C. B. J. Snyder, Arch., 59th St., and Fark Ave., by Clementine M. Silverman, 2012 Seventh Ave., for a 7-story brick flat, 50 × 91 ft., at 98th St., nor Arch., 59th Money, 313 Ave. A, for a 6-story brick stable, 75 × 95 ft., at 408 to 407 East 23d St., to cost about \$70,000, Rudolph Moeller, Arch., 956 Ea

NEW YORK, N. Y.—Bids are asked by the board of education, 59th St. and Park Ave., until Dec. 3 for completing public school No. 64, Broadway, Woodhaven, Borough of Queens.

ROCHESTER, N. Y.—Reports state that several new buildings will be erected at the Rochester State Hospital for the Insane, to cost about \$300,000.

for the Insane, to cost about \$300,000.

JERSEY CITY, N. J.—J. J. Wiseman, Secy. board education, writes us that the board of finance has been asked to appropriate the money for the annex to the Union St. schoolhouse, but has as yet taken no action.

NEWARK, N. J.—Bids are asked until Nov. 27 for erecting the Fifth Ward Engine House on Congress St. Alfred Peters, 215 Ferry St., Arch.; James F. Connelly, Cy. Cik. TRENTON, N. J.—On Nov. 23 this city will sell \$50,000 in bonds for constructing the new public library building. W. J. B. Stikes, Cy. Treas.

ALLEGHENY, PA.—The city has voted to issue \$100,000 in bonds for an addition to the city home and \$83,000 for patrol and engine stations.

ALLEGHENY, PA.—Bids are asked by the department

ALLEGHENY, PA.—The city has voted to issue \$100,000 in bonds for an addition to the city home and \$83,000 for patrol and engine stations.

ALLEGHENY, PA.—Bids are asked by the department of public safety until Nov. 30 for erecting an engine-house at Branch and Forrest Sts. J. R. Murphy, Dir. CATASAUQUA, PA.—Frank R. Watson, 1208 Chestnut St., Philadelphia, has let the contract for the new church building here to Marts & Son, Allentown.

LANCASTER, PA.—The Lancaster Trust Co. has in trust a fund for the erection of a home for orphans, to cost about \$75,000. Competitive plans will be asked.

PHILADELPHIA, PA.—Bids are asked until Dec. 1 for installing a steam heating system in the storehouse building at the League Island Navy Yard. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.—Doyle & Doak, 1509 Sanson St., have been awarded the contract for the new Harrison apartment house, at 37th and Chestnut Sts., for Thomas T. Twibill.

PHILADELPHIA, PA.—The contract for erecting the administration portion of the armory building for the Second Regiment, N. G. P., at Broad St., near Susquehanna Ave., 40×200 ft., has been let to Thomas Relly, 1616 Thompson St. Rankin & Kellog, Archs., 1024 Walnut St.—We are informed that blds will be received in about a week for erecting a 4-story brick and stone business and hall building, 54 × 137 ft., at Sixth St., near Fairhill, to have hot water heat, electric lights and elevators, etc., for Harry J. Frank; Herman A. Schweizer, Arch, 247 Richmond St.—Charles E. Oelschiager, 1502 Market St., will, it is said, prepare plans for a 2-story office and market building for the Federal Market Co. to cost about \$30,000.—The board of education has asked the council to appropriate \$1,000,000 for four new high school buildings and \$2,000,000 for four new high school buildings and \$2,000,000 for lower perment house at 13th and Walnut Sts. for John Stafford.

PHILADELPHIA, PA.—Kennedy & Housekeeper, Real Estate Trust Bidg., are said to have prepared plans for a 12-story bric

at 13th and Walnut Sts. for John Stanord.
PHILADELPHIA, PA.—Kennedy & Housekeeper, Real
Estate Trust Bldg., are said to have prepared plans for
a 12-story brick apartment house at 13th and Arch Sts.
—Stearns & Castor, Stephen Girard Bldg., have completed plans for a 2-story brick varnish building, 174 x
202 ft., a Summerdale Station for the Wolff Process Leather Co. of Summerdale, to cost about \$50,000.

er Co. of Summerdale, to cost about \$50,000. PHILADELPHIA, PA.—The contract for erecting the new schoolhouse at Dittman and Longshore Sts., has been let to Harry Kummerle at \$45,800.—The bids for erecting the schoolhouse at Sits St. and Sonicum Ave., were all above the appropriation and were rejected. PHILADELPHIA, PA.—Herman Miller, Crozier Bidg., is preparing plans for a 6-story brick building at 18th and Cherry Sts., for the Medico-Chirurgical Hospital.—James H. Windrim, 1107 Wainut St., is preparing plans for the new building for the Jefferson Medical College at Tenth and Sansom Sts.

PITTSBURG, PA.—Andrew Carnegie has offered to build a technical school in connection with the Carnegie Insti-tute and endow it with \$1,000,000.

tute and endow it with \$1,000,000.

ROCHESTER, PA.—E. Brellmaier & Sons, 602 Second Ave., Milwaukee, Wis., are said to be preparing plans for a church here to cost about \$150,000.

BALTIMORE, MD.—Baldwin & Pennington, 44 South St., are preparing plans for a hotel building at Charles and Chase Sts., to cost about \$750,000.

BALTIMORE, MD.—We are informed that the contract for erecting the 7-story brick business building, 113 × 86 ft., on Liberty St., to cost about \$100,000 for Louis Yakel,

Pres. Kohler Mfg. Co., has been let to J. Henry North Fremont Ave.; Jackson C. Goll, Arch., Charles St.—The board of estimate has deel propriate \$50,000 for creeting a new schoolhouserly.

PORT DEPOSIT, MD,—The following contribeen let for constructing buildings at the Ja Institute memorial building, to cost about \$1 Doyle & Doak, 1509 Sansom St., Philadelphia, ing hall to E. S. Sentman, Port Deposit, \$21,422 tages to Walker & Gibson, Oxford, Pa. Herm 1180 Broadway, New York, was awarded the ce the dormitory, at \$21,236, and for the infirmary S. M. Neff, 120 Liberty St., New York, was aw contract for filters at \$20,000.

WASHINGTON, D. C.—Charles J. Bell and of the late G. G. Hubbard, propose to erect a building for the National Geographic Society, to \$40,000.

WASHINGTON, D. C.—Bids are asked by the commissioners until Dec. 4 for constructing a ward at the Washington Asylum, on 19th St., N stated in our advertising columns.

RICHMOND, VA.—W. E. Cutshaw, Cy. Engr., that nothing definite has been done toward erectiall building further than to get preliminary tion.

lings

ROANOKE. VA.—Fire recently destroyed the of the Virginia College; loss about \$75,000.

NEW MARTINSVILLE, W. VA.—Bids are now received, according to reports, for erecting a new house, to cost about \$40,000.

house, to cost about \$40,000.

CLARKESVILLE, GA.—We are informed it Clarkesville Tobacco Mfg. Co. will let contracts nearly for constructing a warehouse. J. H. Hicks, S. ROLLING FORK, MISS.—The county clerk has rected to advertise for plans and specifications occurrhouse, to cost about \$25,000.

STARKVILLE, MISS.—The board of supervisaccepted plans of Bryan & Weathus, Southern Bldg., Memphis, Tenn., for a new courthouse, about \$25,000.

about \$25,000.

SHREVEPORT, LA.—We are informed that the Jas Relly Gordon Co., Dallas, Tex., is preparing plans for a 2-story brick and stone, fireproof jail building. 88 x 110 ft., for Caddo Parish, to cost about \$65,000.

NASHVILLE, TENN.—Brown & Brown, North Spruce St., have plans for a new depot on Broad St., for the Tennessee Central and Nashville, Florence & Southern R. R., to cost about \$100,000.

HENDERSON, KY.—A. Waller & Co. write us that no steps are likely to be taken toward rebuilding their burned elevators until next March.

BEDFORD, O.—The trustees have appointed a commit-tee to secure plans for a new jail building. BOWLING GREEN, O.—Reports state that a petition is being circulated for a new jail building, to cost about \$50,000.

\$50,000.

CINCINNATI, O.—The Pittsburg Plate Glass Co. has taken out a permit for a warehouse at Court St., Broadway and Eggleston Ave., to cost about \$80,000.

CLEVELAND, O.—The county commissioners are said to be considering the question of cailing a special election to vote on the question of issuing bonds for a new court-house.—Press reports state that the McKenzie Reshv Co. will erect a 3-story brick apartment house at Wade Park Ave., near Marcy St., to cost about \$55,000.

CLEVELAND, O.—Bids are asked by the clerk of the board of control until Dec. 4 for constructing nolice barns on East Madison Ave. and Doan St. M. F. Barrett, Dir. Police.

on sast Madison Ave. and Doan St. M. F. Barrett. Dir. Police.

COLUMBUS, O.—J. S. Walters, Supt., writes us that the question of an addition to the workhouse is in the bands of the council committee and no action has yet been taken.

FINDLAY. O.—The people of this city have voted to issue \$50,000 in bonds for erecting a new city hall.

TOLEDO, O.—Bids are asked until Dec. 15 for erecting a new schoolhouse at Millard St. and Tiffin Ave., Iron-ville. Franklin Hubbard. Cik. Bd. Education.

JEFFERSONVILLE, IND.—Bids are asked until Dec. 6 for making changes in the buildings at Jefferson Depot. C. R. Barnett, Deputy Q. M. Gen.

DALE, MICH.—Bids are asked by the building committee of school district No. 2 until Dec. 1 for erecting a new schoolhouse. J. E. Armbruster, Com.

WATERFORD, MICH.—The high school building here was recently destroyed by fire.

CHICAGO, ILL.—Plans are said to have been filed by

mittee of school district No. 2 until Dec. 1 for erect new schoolhouse. J. E. Armbruster, Com.

WATERFORD, MICH.—The high school building was recently destroyed by fire.
CHICAGO, ILL.—Flans are said to have been file John Hamilton for a 3-story brick apartment house x85 ft., at 1664 to 1671 Kenmore Ave., to cost \$80,000, A. S. Hecht. Arch., Metropolitan Block, Ed. Raymond, builder, 925 Argyle St.; by A. R. Clark & 164 Dearborn St., for a 3-story brick apartment bill x 92 ft., at 433 424 St., to cost about \$75,000, B. Co., Archs., 189 La Salle St.; by the board of etion, for a 2-story brick schoolhouse, 181 x 82 S019 to 8029 Normal Ave., to cost about \$90,000, V. Mundle, Arch., N. Y. Life Bidg., Alfred Anderson, but 945 Union Ave.; by Harry Raymond, for an 8-brick apartment house, 37 x 129 ft., at 169 Walton and 232 Pine St., to cost about \$30,000. Wilson & shall, Archs., 218 La Salle St., Geo. A. Fuller Co., ters, Marquette Bidg.; by Martin A. Ryerson, for story brick addition, 68 x 167 ft., at 182 to 186 W. T. & W. I. Clark, builders. Chamber of story brick reight and storehouse, 79 x 396 ft., at 68 South Water St., to cost about \$53,000. W. T. & Arch., I George B. Swift & Co., for story brick freight and storehouse, 79 x 396 ft., at 68 South Water St., to cost about \$50,000. F. A. Treat. Arch., I C. R. R. Station, George B. Swift & Co. arch., Edg., T. A. Collins, builder La Balle St.; by W. A. Forbes, for a 3-story brick ment house, 100 x 50 ft., at 5800 Mehigan Ave., to cost about \$57,000. W. B. Mundle. Arch. Life Bidg., August Krevis, builder, 92 Evergreen St. Chimber of Commerce Bidg., T. A. Collins, builder La Balle St.; by W. A. Forbes, for a 3-story brick ment house, 100 x 50 ft., at 5800 Michigan Ave., is said to be preparing plans for an apartment on the Drexel Boulevast, 40 x 120 ft. to cost about shoulder, the cost about souther. Arch., Forbes, for a 3-story brick about S5,000. M. Palmer, Arch., Monadoock, Jacob Rodatz, builder, 414 The Rookery.

CHICAGO, ILL.—Arthur Poster, 1310 Cottage Ave., is sa

CHICAGO. ILL.—Arthur Foster. 1310 Cottage Ave., is said to be preparing plans for an apartment on the Drexel Boulevast, 70 x 120 ft., to cost about 000.—It is stated that Collins & Morris will erestory brick apartment house at Woodlawn Ave. as St., to cost about \$60,000. H. L. Newhouse, Arch. Prairie Ave.

TAYLORVILLE, ILL.—The people of this county have ded to issue \$75,000 in bonds for erecting a new court-

BARABOO, WIS.—The county supervisors are said to be onsidering the question of erecting a new courthouse, to ost about \$50,000. J. M. True, Chn. Com. KENOSHA, WIS.—The county commissioners are condering the question of erecting a new courthouse, according to reports.

GREEN BAY, WIS.—A special committee has been appointed to look into the question of erecting a new city all and library building, to cost about \$50,000. The pestion of issuing bonds will be voted on at the spring tections.

MILWAUKEE, WIS.—The contract for erecting a 5-tory brick warehouse on 9th St., near Chestnut St., for a Pabst Brewing Co., has been let to G. F. Steuwe, 308 oth St., at \$43,700, according to reports.—It is stated but the Wisconsin Telephone Co. will erect a 5-story rick exchange building, 75 × 100 ft., on Fifth St., near hesinut, to cost about \$100,000.

Chestnut, to cost about \$100,000. MILWAUKEE, WIS.—Reports state that the Pabst Brewery Co. will erect a new 7-story stock brick building, 50 x 140 ft., to cost about \$275,000, and a 3-story brick addition to the bottling department, 150 x 300 ft., to cost about \$125,000.

ADEL, IA.—The people of this county have voted to issue \$85,000 in bonds for erecting a new courtbouse.

DES MOINES, IA.—Press reports state that the Drake Medical College will erect a new building, to cost about \$100,000.

NDIANOLA, IA.—Proudfoot & Bird, 320 Fifth St., Des Monies, are said to be preparing plans for a new building here for Simpson College, to cost about \$40,000.

AUSTIN, MINN.—W. T. Turner, Chamber of Commerce Bidg., St. Paul, is said to have prepared plans for a 4-story brick hotel building, 70×70 ft., to cost about \$40,000.

a 4-story brick hotel building, 70×70 ft., to cost about \$40,000.

MINNEAPOLIS. MINN.—It is stated that Charles R. Aldrich, University of Minn., 5t. Anthany Park, Minn., is reparing plans for a library building to be erected by Gov. J. S. Pilisbury at Seventh St. and Second Ave., S. E., at a cost of \$50,000. to be presented to the city.

MINNEAPOLIS, MINN.—Harry W. Jones, 916 Lumber Exchange Bidg., is said to be preparing plans for a new 5-story brick hotel building here, to cost about \$75,000.

RED WING, MINN.—Reports state that the board of trustees of Hague synod has adopted the plans of Omeyer & Thori, Chamber of Commerce Bidg., St. Paul, for a new building at the seminary, to cost about \$40,000.

FORT YATES, N. DAK.—Bids are asked until Dec. 8 for constructing an addition to dormitory, laundry building, shops, water and sewer systems, and for the removal of certain buildings at the Standing Rock Indian Agency. W. A. Jones, Comr. Indian Affairs, Department of the Interior, Washington, D. C.

COLUMBIA, MO.—Press reports state that an election

or certain buildings at the Standing Rock Indian Agency.

M. A. Jones, Comr. Indian Affairs, Department of the Interior, Washington, D. C.

COLUMBIA, MO.—Press reports state that an election will be held Dec. 8 to vote on the question of Issuing \$75,000 in bonds for erecting a new courthouse. L. T. Sealby, County Clk.

KANSAS CITY, MO.—It is stated that J. A. Rose will erect a new office building on Grand Ave.

ST. LOUIS, MO.—The following bids have been received by the board of education for constructing (except heating and ventilating work) the Wyman schoolhouse on Theresa Ave.: Gerber Bross, \$100,866; McNally & Co., 2008 Olive 8t., \$117,265; A. Anderson & Co. \$110,000; Lentz-Helm Bidg. Co., \$16,180; John Schenk, \$116,916; John Lew, \$109,909; Nicholas Petigreen, \$112,500; Hiram Lloyd, \$111,457; R. Schinnick, \$120,748; Rountree Construction Co., \$110,487; Adam Bauer, 304 North Eighth St., \$106,300 (accepted). The contract for plumbing was let to Houser & Deerner, at \$1,100 and for the electrical work, etc., to F. A. Newberry & Co., at \$2,665.

SAN ANTONIO, TEX.—The buildings of the A. B. Frank Co., wholesale grocers, and Gold, Frank & Co., wholesale grocers, on West Commerce St., were recently damaged by fire, loss about \$250,000.

SEGER, OKLA. TER.—Bids are asked until Nov. 28 for erecting a brick schoolhouse at the Seger School Colony. W. A. Jones. Comr. Indian Affairs, Department of the Interior, Washington, D. C.

SEATTLE, WASH.—Bids are asked until Dec. 7 for erecting an addition to the B. F. Day schoolhouse, and until Jan. 7 for installing a heating and ventilating apparatus in the senior grammar school building. Lyman Banks, Secy.

FRESNO, CAL.—Louis Manuel, Cy. Engr., writes us that as yet nothing has been done toward rebuilding the

FRESNO, CAL.—Louis Manuel, Cy. Engr., writes us that as yet nothing has been done toward rebuilding the burned hospital.

burned hospital.

MARTINEZ, CAL.—Press reports state that the board of supervisors have accepted plans by Cunningham Bros., Claus Spreckle's Bldg. San Francisco, for a new courthouse, to cost about \$100,000.

SAN FRANCISCO, CAL.—Blds are asked until Nov. 24 for constructing a new schoolhouse. A. S. Emery, Cik.

MANILA. P. I.—Frederick W. Atkinson. Supt. Education, 4s said to have submitted to Gen. McArthur a bill appropriating \$1,500,000 in gold for public education purposes.

WATER-WORKS

(For foreign water-works see under "Foreign Contracts and Export News.")

WESTMINSTER, VT.—Reports state that it is proposed build works.

WESTMINSTER, VT.—Reports state that it is proposed to build works.

BROOKLINE. MASS.—At the town meeting on Nov. 22 the water board will ask for authority to buy a 5,000,000-gallon pumping engine to cost about \$40,000.

IPSWICH, MASS.—The question of filtering the water supply is reported as being considered.

WALTHAM, MASS.—The aldermen have voted to appropriate \$3,000 for a new emergency pump.

HARTFORD, CONN.—Plans are being considered for improving the quality of the water from reservoir No. 4. No steps toward construction work has yet been begun. W. E. Johnston, Engr.; J. M. Fairfield, Pres. Water Bd.

NEW HAVEN, CONN.—Bids are asked until Dec. 4 by the New Haven Water Co. for constructing a water supply tunnel 6½ ft. in diameter from Farm River in Foxen to Lake Saltonstall, about 1,900 ft., as stated in our advertising columns. The tunnel will cost over \$100,000. Eli Whitney, Pres.; A. B. Hill, Engr., New Haven.

PLAINVILLE, CONN.—The question of securing a charter, with a view to the municipal ownership of the works.

WOODBURY, CONN.—The contract for extending the works has been let to Frick & Jackson, masons, of Woodbury, C. F. Stiles, Engr., Southbury, Conn.; A. W. Mitchell, Supt.

CALLICOON DEPOT, N. Y .- Reports state that the ques-

CENTRAL ISLIP (L.I.), N. Y.—The following bids were received by H. E. Howland, Pres. Bd. Mgrs., Manhattan State Hospital, I Madison Ave., New York, for furnishing and installing works for the hospital buildings, as advertised in Engineering News; (1) being for furnishing the entire work as shown and specified; (2) provided the stand-pipe and connections thereto are omitted, to deduct from proposal No. 1; (3) provided the work for groups I and 2 are omitted from the point "A," to deduct from proposal No. 1; (4) provided all excavating and refilling is omitted, to deduct from proposal No. 1; (6. L. Heins, State Arch., Albany: S. M. Neff. 120 Liberty St. New York, (1) \$30,900, (2) \$7,700, (3) \$9,100, (4) \$1,500, 120 working days necessary to complete: Wm. N. Tobin, Syracuse, N. Y., (1) \$44,681, (2) \$10,662, (3) \$9,130, (4) 3 000, 180 working days; Howe & Basseft, Rochester (1) \$44,965, (2) \$7,508, (3) \$11,000, (4) \$1,261, 200 working days; R. B. Carter & Co., 35 Dey St., New York, (1) \$46,854, (2) \$7,420, (3) \$10,700, (4) \$1,090, 130 working days; Kieley & Stahl. Albany, (1) \$49,210, (2) \$8,990, (3) \$11,300, (4) \$1,572, 200 working days; Kieley & Stahl. Albany, (1) \$49,210, (2) \$8,990, (3) \$11,300, (4) \$1,572, 200 working days; EAST RANDOLPH, N. Y.—This place has voted to issue \$10,000 in bonds for extending the works. There will be wanted a pump with a capacity of 150 gallons of water a minute pumped to a height of 225 ft., the pump to be operated by water pover; mains from springs two miles distant, etc. The village officials wish to secure at once a person to make estimates, etc., as it is desired to do the work th's fall; population, 1,000. Dr. J. H. Sackrider, Prez. Village.

Pres. Village.

FULTONVILLE, N. Y.—The proposed gravity works will have 8 and 12-in. and smaller pipe, etc. Plans have not yet been completed; population 1.200. Howell & Taylor, Engrs, Washington, D. C. C. R. Rickard, Pres.

KEENE VALLEY, N. Y.—It is proposed to build works, according to reports.

KEENE VALLEY. N. Y.—It is proposed to build works, according to reports.

LE ROY. N. Y.—Jonathan Champlin, of Penn Yan, N. Y. is reported as prospecting for a new water supply. O. F. Woodward, of LeRoy, and S. W. Titus, of 662 Carroll St., Brooklyn, are interested.

NEW YORK. N. Y.—Bids are asked by the department of public charities, foot of E. 26th St., until Dec. 3 for the materials and construction of a water tower extension to the Metropolitan Hospital on Blackwell's Island.

SYRACUSE, N. Y.—The council has voted to spend about \$100,000 on new mains for Elmwood and other parts of the city. Efforts are being made to introduce water meters. J. H. Moffit, Supt. Water Bureau.

ATLANTIC CITY. N. J.—Reports state that the contract for constructing the 30-in. water main of riveted steel pipe across the meadows has been let at \$153,619 to the T. A. Gillespie Co., Westinghouse Bidg. Pittsburg. Pa., and the Havemeyer Bidg., New York. The itemized bids are given under Contract Prices.

EAST ORANGE, N. J.—A reservoir well for a new water supply is reported to have been located. E. E. Bruen, Mayor; Councilman Gedney, Chn. Com.

HALEDON, N. J.—Reports state that Wm. Buschmann is building a tunnel through High Mountain to be 600 ft. and 600 ft. deep at the mouth for a water supply from Franklin Lake.

ALLENTOWN, PA.—Reports state that this city will soon you can be supplyed to the contract of the contract of

ranklin Lake.

ALLENTOWN, PA.—Reports state that this city will soon onte on the question of issuing \$200,000 in bonds for improving the works.

vote on the question of issuing \$200,000 in bonds for improving the works.

ARCADIA, PA.—John W. Clark, J. D. Ake and S. H. Hicks, of Johnstown, Pa., have organized a company to build works for this place.

BEAVER FALLS, PA.—A suit has been brought to enjoin the Peoples Water Co. from condemning land for an increased water supply.

ETNA, PA.—The Riter-Conley Mfg. Co., 41 Cortlandt St., New York and Pittsburg, have the contract for a large water tank for an increased water supply.

HARRISBURG, PA.—The Barr Pumping Engine Co., Philadelphia, has been awarded the contract at \$49,500, for furnishing the new pump, according to reports.

MONONGAHELA, PA.—Reports state that bids will soon be asked for extending the pumping station.

OBERLIN, PA.—The question of an increased water sup-

OBERLIN, PA.—The question of an increased water supply is reported as being considered.

DERRIM, PA.—The question of an increased water supply is reported as being considered.

PHILADELPHIA, PA.—The common council has passed the ordinance authorizing the installation of a special fire main in the congested district to cost about \$300,000.

PITTSBURG, PA.—Surveys for the proposed filtration plant have been begun. It is expected that bids will be asked for the construction about Jan. 15. and work begun about April 1. Allen Hazen, Consuit. Engr., 220 Broadway, New York; W. F. Miller, Des. Engr., Pittsburg.

READING, PA.—Councilman Close has presented an ordinance empowering the water commissioners to place water meters in all the dwellings

SCRANTON, PA.—The Trout Lake Water Supply Co. has been incorporated, with a capital of \$10,000, by R. T. H. Halsey, of New York; F. H. Clemons and H. C. Reynolds, of Scranton.

DELAWARE CITY, DEL.—C. T. Leland, Pres. Quaker-town Traction Co., Philadelphia, is reported as building works here.

town Traction Co., Philadelphia, is reported as building works here.

BALTIMORE, MD.—The board of public improvements has reported against Councilman Steinnacker's ordinance appropriating \$200,000 for the purchase of the works of the Baltimore County Electric Light & water Co. in the 19th ward. Water Engineer estimates that new mains could be extended to the ward at a cost of \$10,000.

HYATTSVILLE, MD.—The council has decided to post-pone the building of the proposed works until spring, athough bids for the materials, etc., were recently received.

WINCHESTER, VA.—P. W. Boyd, Supt. Water-Works, in his last report to the council, recommended the adoption of water meters for some specific uses. It was referred to the water committee, who will make a report on Dec. 4. The matter of putting in the meters cannot be decided by the council before January. Pop., 5,600.

WOODSTOCK, VA.—This place has voted to issue \$20,000 in bonds for works, the construction of which, it is report will be started at once. The source of water supply will be the springs in Massanutten Mountain, about 1½ miles from here.

BARIUM SPRINGS, N. C.—Reports state that works, a sewerage system, buildings, etc., will be constructed at the Barium Springs Orphanage.

ELON COLLEGE, N. C.—It is stated that S. M. Smith, of this places, wants estimates, etc., for works, windmills, etc., for the college buildings.

JASPER, FLA.—The city works have been sold to a local company. B. B. Johnson, Mayor.

IRONDALE, ALA.—Hefin & Milsaps have received the contract to sink five wells for the water supply for the Irondale Water, Light & Power Co. The wells will be 900 ft. deep and are to furnish 2,500,000 gallons a day. The Southern Bridge Works has the contract for the pump

house, the Birmingham Boiler Works that for the boilers and stack, the Dimmick Pipe Works that for the pipe and castings, and H. R. Worthington, New York, that for the pumping engine. The company proposes to furnish water to Irondale. Gale City, Woodlawn and other places. Robt. R. Zeil, Mgr., Irondale.

ENSLEY, ALA.—The legislature will be asked to grant this place a charter to build works, the water to be supplied by the Birmingham Water Co. Address Mayor Powell and Alderman Perkins.

NATCHEZ, MISS.—The question of an increased water.

NATCHEZ. MISS.—The question of an increased water supply is reported as being considered by the aldermen.

PADUCAH, KY.—The council has directed the Paducah Water Co. to furnish an increased water supply. Harry Fisher, Cy. Cik.

WICKLIFFE, KY.—This place will soon begin construction of its proposed works, bonds for which were voted Nov. 6.

Nov. 6.

VINE GROVE, KY.—This place is said to have voted to issue \$3,000 in bonds for extending the works. H. W. Scott, Cy. Clk.

RYESVILLE, O.—The question of works is reported as being considered.

being considered.

CINCINNATI, O.—Bids are asked until Dec 18 for furnishing and installing four 30,000,000 gallon pumping engines, a 30-ton capacity electric crane, and boilers for the new water works. as stated in our advertising columns. Chas. G. Roth, Clk. Bd. of Trustees, Comrs. of Water-Works.

CLEVELAND, O.—Bids are asked until Dec. 15 for fur-nishing and erecting two water tube bollers, with brick setting and mechanical stokers, complete, in boller-house No. 2. as stated in our advertising columns. W. P. Rice, Dir. Pub. Wks.

Dir. Pub. Wks.

COLUMBUS, O.—Reports state that plans for the proposed works are being prepared by Sami. M. Gray. 10 Weybossett St., Providence, R. I., are about completed. MARION, O.—Work has just been commenced on laying 4½ miles of 4.6 and 8-in. water pipe for the Marion Water Co. About 58 new hydrants will be wanted. Three new 100-HP, boilers are being put in. The company proposes to construct a new coal house and a dwelling. E. H. Cowan, Supt.; W. E. Scofield, Receiver.

to construct a new coal house and a dwelling. E. H. Cowan, Supt.; W. E. Scofield. Receiver.

SANDUSKY, O.—The water board has rejected the blds recently received for a 10,000,000-gallon pump engine.

VAN WERT, O.—Rids are asked until Nov. 26 for furnishing and installing an air compressor and lift system, a brick reservoir, etc., according to reports. G. L. McKibben, Consult. Engr.; C. F. Manship, Secy. Trustees.

WELLSTON, O.—The water trustees have rejected the blds received Nov 12 for enlarging the reservoir.

WELLSVILLE, O.—An election will be held Nov. 27 to vote on the question of issuing \$75,000 in bonds for improving the works and \$65,000 for sewers.

FRANKLIN, IND.—Blds are wanted for an air compressor sufficient for three 8-ln. wells 100 ft. deep. A. M. Barron, Pres. Franklin Water, Light & Power Co.

GRAND RAPIDS, MICH.—Bids are asked until Feb. 15 for furnishing the city with a nermanent pure water supply of not less than 10,000,000 gallons a day, bidders to furnish plans, specifications, etc., as stated in our advertising columns. L. W. Anderson, Acting Cy. Engr.; W. J. Sproat, Cik.; Jos. Emmer. Pres. pro tem. Bd. Pub. Wks.

CARROLLTON, ILL.—The council has awarded to Chas. A. Stookey, of Belleville, Ill., the contract for extending the works, at \$18,580.

PANA, ILL.—After condemnation proceedings are settled by the courts, the city will establish another pump-

PANA, ILL.—After condemnation proceedings are set-tled by the courts, the city will establish another pump-ing station, and will add about a mile of new mains. The wafer supply is secured from wells. A. B. Corman, Mayor.

water supply is secured from wells.

A. B. Corman, Mayor.

APPLETON, WIS.—The council will decide Nov. 26 on the question whether the city will own the works or continue to allow the Appleton Water Co. to do so.

FORT ATKINSON, WIS.—The council has voted to issue \$35,000 in bonds for works, according to reports. Giles Hibbard, Cy. Cik.

GRAND RAPIDS, WIS.—Reports state that the contract for building works to cost about \$50,000 will probably be let in January. C. F. Loweth, Engr., First National Bank Bldk., St. Paul, Minn.

TWO RIVERS, WIS.—J. P. Miller & Co., of Chicago, have been awarded the contract at \$61,000, for works and an electric plant. Alvord & Shields, Engrs., 127 Hartford Bldg., Chicago; P. G. Agnow, Mayor.

DYERSVILLE, IA.—The Dyersville Light & Water Co. has been incorporated, with a capital of \$15,000, by Jas. J. Dunn, Jos. Armstrong and D. A. Gehrig.

OSAWATOMIE, KAN.—Plans and estimates for works to cost \$38,700, have been completed by Burns & O'Donnell, Postal Telegraph Bldg., Kanssa City, Mo.

STANDING ROCK AGENCY, N. DAK.—Bids are asked.

cost \$38,700, have been completed by Burns & O'Donnell, Postal Telegraph Bidgs, Kansas City, Mo.

STANDING ROCK AGENCY, N. DAK.—Bids are asked until Dec. 8 for furnishing the materials and for constructing works and school buildings at the Standing Rock Agency. Plans may be seen at the U. S. Indian Warehouses, 77 Wooster St., New York, and 225 Johnson St., Chicago, W. A. Jones, Comr. Indian Affairs, Dept. of Interior, Washington, D. C.

APPLETON CITY, MO.—The Appleton City Water & Power Co. has been incorporated with a capital of \$3,000, by J. B. Egger and E. M. King.

ST. LOUIS, MO.—Robt. E. McMath, Pres. Bd. Pub. Improvements, is quoted as stating that about \$10,000,000 will he wanted for a filtration plant, \$1,500,000 for swing before 1903. Of this amount about \$3,000,000 will be wanted for a filtration plant, \$1,500,000 for sweers, \$2,000,000 for bridges and \$2,500,000 for improving the building, etc. J. H. Sturgeon, Cy. Comptroller.

WEST PLAINS, MO.—Bids are asked until Dec. 4 for furnishing the machinery, materials, etc., and for constructing works and an electric plant, as stated in our advertising columns. Owen Ford, Consult. Engr., 710 Security Bidg.. St. Louis, Mo.; H. G. Doty, Mayor; G. H. ELDORADO, ARK.—The question of works is reported as again being considered.

MENA, ARK.—P. J. Gorman, of Dallas, Tex.. is reported to have asked for a 25-year franchise for works, the city to contract for 35 hydrants, at \$35 a year. The council, however, is considering a plan for municipal works.

however, is considering a plan for municipal works.

DALLAS, TEX.—Chester B. Davis, of Chicago and New York, has submitted a report on the works. He states that the mains are too small, as about 45 miles of the 90 miles of mains of the city are only 4 ins. in diameter, and about 35 miles of 6-in. pipe. It is proposed to spend \$100.000 at once on improvements to the works. Address W. J. J. Smith and Alderman Long, Chn. Water Com.

WICHITA FALLS, TEX.—Johnson & Dean, Wichita Falls, have been awarded the contract for building a dam for the Wichita Falls Irrigation Co.

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KINGFISHER, OKLA.—This place is reported to have re-ently voted to issue \$26,000 in bonds for works and an

centry voted to issue \$26,000 in bonds for works and an electric plant.

PAWNEE, OKLA. TER.—W. H. Crook & Co., Fail City, Neb., submitted the lowest bid, at \$19,000, Nov. 10 for constructing works. Geo. Hopper & Co., Arkansas City, Kan., submitted the only other bid, at \$22,800. Hiram Phillips, Consult Engr., Lincoln Trust Bidg., St. Louis.

DENVER, COLO.—J. B. Hunter, Cy. Engr., writes us that the city did, by ordinance, signed and approved on Jan. 16, authorize the issuance of bonds in the sum of \$4,700,000 for use in the purchase or construction of water-works. A number of bonds were sold and it is understood that the entire issue is contracted for to be entirely placed by May 1, 1801. The water proposition is under the direction and supervision of the board of public works of this city, which board is now at work on a preliminary investigation of the subject. A local report on Nov. 13 stated that the members of the board of public works are inspecting sites near the mountains for a water supply. There is said to be a site on St. Vrain Creek, above Lyons, for a reservoir which, with the pipe line, is estimated to cost about \$1,000,000.

GOLDFIELD, COLO.—The council has voted to purchase land for a new reservoir.

Lyons, for a reservoir which, with the pipe line, is estimated to cost about \$1,000,000.

GOLDFIELD, COLO.—The council has voted to purchase land for a new reservoir. Work on the reservoir, pumping station and new mains to cost about \$20,000, will be begun at once, according to reports.

SPOKANE, WASH.—Reports state that the board of public works will at once take steps for the building of a 400,000-gallon standpipe in Cliff Park, to cost about \$15,000, exclusive of the proposed mains.

PORTLAND, ORE.—Bids were received Nov. 19 for supplying 12,000 gallons a day to the county poor farm. W.B. Steel, Chn. County Comrs.

WOODBURN, ORE.—A.B. Kurttz is reported to have been granted a franchise for works and an electric plant.

LOS ANGELES, CAL.—Press reports state that the council has decided to take steps for the immediate construction of headworks for a water system to be owned by the municipality. According to the plans, this plant can be used in connection with the present works, if the latter is acquired by the city, or in connection with a new plant, if it becomes necessary to construct one. There is now in the treasury \$104,300 available for the building of the headworks. This money was raised by a provision in the general fax levy for a sinking fund and interest on water bonds which were voted for the purchase of the existing water plant of the Los Angeles City Water Co. The validity of these bonds was called in question and they have never been disposed of. Consequently the fund raised for paying the interest on them has accumulated in the freasury and it is now proposed to utilise it as mentioned above.

MARYSVILLE, CAL.—Reports state that Mayor Brooks will gak for pay bids for a survey and stream for the survey and stream fo

paying the interest on teem has accumulated in the treasury and it is now proposed to utilize it as mentioned above.

MARYSVILLE, CAL.—Reports state that Mayor Brooks will ask for new bids for a current for running the city pumping plant or for a steam pumping plant.

OAKLAND, CAL.—The city has an option on about 300 acres of land, distanct 12 miles, and which has several flowing wells of not more than about 300 ft. depth. Recently two new wells have been sunk to a depth of about 545 ft. passing through several strata of water bearing gravel and ending in a deep stratum of loose, coarse gravel indicative of water in large quantities. With the air lift pumping process these wells have yielded an average of over 400,000 galions of water per diem per well. About 11,000,000 galions of water per day are required to supply Oakland's sunts. Although only a few hundred yards apart, one of these wells shows an excess of chlorine, while in the other the percentage of chlorine is low enough to be quite satisfactory. If possible the city of Oakland would prefer to secure its municipal water supply from Lake Taboe or some other mountain source, but the estimated cost of this is so high, \$16,000,000, that Oakland, with its bonding capacity limited by law to \$6,000,000 (15% of its real estate assessed valuation) cannot undertake the project alone, and will probably have to wait until the city of San Francisco takes up the matter which it has now under consideration and act jointly, but this will require special legislation by the state to permit several municipalities to jointly own or construct such a system. Another project is for the city of Oakland to acquire by condemnation the property of the private corporation now supplying the community with water. B. C. Culvellier, Councliman-at-Large; M. K. Miller, Engr.; W. R. Snow, Mayor.

Mayor.

SAN FRANCISCO, CAL.—The Winnemucca Water & Light Co. has been incorporated by Francis Smith, W. W. Montague, Jos. M. Quay and Horace Davis, with a capital of \$100,000, of which \$500 is paid in.

HALIFAX, N. S.—F. W. W. Doane, Cy. Engr., has recommended that water meters be installed as the best method of solving the water problem. The proposed new water supply will cost about \$1,000,000, but Mr. Doane considers that this work need not be done if meters are installed.

THOROLD, ONT.—The question of an increased water supp.y from the Welland Canal is being considered.

HINTONBURG, ONT.—Bids are asked until Nov. 26 for excavating the rock and earth for the trenches for the water main extensions. Check \$200. Wm. Mason, Cik.; F. J. Merrill, Chn. Com.

J. Merrili, Chn. Com.

TORONTO, ONT.—The city engineer in his report to the works committee has recommended the purchase of a new 15,000,000-gallon pump, the extension of the 6-ft. conduit and the mains for the high-level district; estimated to cost about \$400,000.

FOXWARREN, MAN.—Bids are reported as being asked the Mayor for works and a sewerage system.

IRRIGATION.

IRRIGATION.

LAKE CHARLES, LA.—The Enterprise Rice & Farm Co., Ltd., has been incorporated with a capital of \$10,000 for the purpose if irrigating 640 acres of rice land. J. H. Mathieu, Pres.; William Wilson, Gen. Mgr.

FORT BENTON, MONT.—T. E. Brady and Bateman & Switzer, of Great Falis, are said to be at the head of a company which proposes to build a dam and ditch, 6 miles long, to carry 100 cu. ft. of water a second, in Western Valley county.

BAY CITY, TEX.—Bids are asked until Dec. 1 by the Matagorda county Rice & Irrigation Co., for installing engines and pumps with a capacity to water 5,000 acres of rice lands, 10-ft. lift, in a station six miles from the railroad depot.

railroad depot.

HOUSTON, TEX.—Bids are asked by the Moore-Cortes Canal Co. for building the twin levees of their rice canal in Matagorda county, on the west side of the Colorado River, requiring about 120,000 cu. yds. of earth. W. C. Moore, Pres., 305½ Main St.—Bids are also asked by I. D. Singletary, 205 Main St., for constructing a canal for an irrigation plant 2,000 yds. long, 9 ft. wide and 3 ft. deep.

LA GRANGE, TEX.—The Bay Prairie Irrigation Co. has been incorporated with a capital of \$225,000. It will construct about 25 miles of canals, capable of irrigating 50,

000 acres, through its land on the Colorado River, eight miles below Wharton, and will erect a pumping station with a capacity of 70,000 gallons a minute. Jonathan Lane, Pres.

GRAND JUNCTION, COLO.—Bids are asked by the Grand Valley Irrigation Co. until Nov. 26 for constructing a main head gate of the company's canal. Clarence C. Johnson, Consult. Engr., Cheyenne, Wyo.; W. S. Wallace, Secy.

Johnson, Consult Engr., Curyener, Will., The Secy.

BAKER CITY, ORE.—The Powder River, Land & Irrigation Co., will, it is said, construct a canal about 16 miles long from the Powder River to a reservoir about two miles east of this city. A distributing ditch about 10 or 15 miles long will be built down the Powder River Valley through Burnt Hollow, where a second reservoir will be built. A dam 60 ft. high, 20 ft. wide at top and 2,200 ft. long will enclose a basin about three-quarters of a mile in diameter to form the first reservoir and will cost about \$125,000. The dam across the mouth of Burnt Hollow, enclosing the second reservoir, will cost about \$75,000 and the supply canal about \$40,000, while the distributing canal will cost about \$10,000. J. H. Parker, Pres.; F. S. Lack, Supt.; C. M. Footer, Surveyor.

ack, Supt.; C. M. Foster, Surveyor.

LEMOORE, CAL.—The Kings River Canal Co. has been corporated with a capital of \$4,000 by M. Lovelace, A. Rhoades, E. P. Ammennan and others, to develop water or irrigation purposes.

ror irrigation purposes.

VALLEJO, CAL.—The Vallejo Reclamation & Farming Co. has been incorporated with a capital of \$600,000 by J. F. Utter, Walter M. Barrett, Jos. Shipper and others to reclaim and develop lands in Napa and Salina counties.

OGDEN, UTAH.—The contract for constructing a dam to cost about \$28,000 in East Canyon for the Davis & Weber Canal Co. has been let to the Utah Construction Co.

SEWERAGE.

DEDHAM, MASS.—At a special election the people of its town voted to issue \$120,000 in bonds for constructing this town

this town voted to issue \$120,000 in bonds for constructing a system.

MALDEN, MASS.—The surface drainage commission it said to have asked for an appropriation of \$3,500 for preliminary surveys for a system.

PITTSFIELD, MASS.—We are informed that J. J. Van Valkenburgh, of South Framingham, is preparing plans for the disposal of sewage by intermittent filtration.

HARTFORD, CONN.—The council has decided to construct a sewer in Park St., Pope Park Highways and across Poke Park and private lands to Riverside St., to cost about \$5,990, also sewers in Smith and Tremont Sts. Henry F. Smith, Cy. Cik.

NEW LONDON, CONN.—W. H. Richards, Engr. Sewer Dept., writes us that the sewer department will lay about 1,500 ft. of 15-in. pips sewers next spring.

ALBANY, N. Y.—The council has passed an ordinance authorizing the construction of a pipe sewer in Second St. Frederick U. Bresler, Cik. Common Council.

BINGHAMTON, N. Y.—The council has passed a reso-

BINGHAMTON, N. Y.—The council has passed a resolution providing for the construction of a sewer in Conk-lin Ave.

BINGHAMTON, N. Y.—The council has passed a resolution providing for the construction of a sewer in Conklin Ave.

NEW YORK, N. Y.—Bids are asked by the department of sewers, 21 Park Row, until Nov. 28 for constructing a sewer in Nicholas Ave., Richmond Borough, requiring about 1,007 ft. of 10-in. and 757 ft. of 8-in. pipe sewer. Jas. Kane, Comr.

WHITESBORO, N. Y.—Bids are asked by the board of trustees until Dec. 5 for constructing a sewerage system, as stated in our advertising columns. Robert Ablett, Pres. Bd.; Knight & Hopkins, Engrs., Rome; A. M. Scripture, Consult. Engr.

BLOOMFIELD, N. J.—The council has decided to join with Newark in the construction of the proposed Passaic River Valley outlet sewer.

PASSAIC, N. J.—The people of this city are considering the questions of joining the proposed trunk sewer or of constructing their own system. Chas. M. Howe, Mayor.

ALLEGHENY, PA.—On Nov. 6 the people voted to issue \$50,000 in bonds for constructing sewers in the 18th Ward.

PITTSBURG, PA.—The council has passed an ordinance authorizing the purchase of 51½ acres of land in Orlara township as a site for the proposed filtration plant. Allen Hazen, 220 Broadway, has been engaged to prepare plans. Surveys will be started at once.

BARIUM SPRINGS, N. C.—The Barium Springs Orphanage will, it is said, construct a cystern and water-works.

DURHAM, N. C.—Press reports state that the board of aldermen will ask for an issue of bonds for constructing a complete system.

a complete system.

SUFFOLK, VA.—Bids are asked until Dec. 10, postponed from Nov. 29 for constructing pipe sewers, as stated in our advertising columns. Hite-Smith & Minshall, Engra., 605 Columbia Bidg., Norfolk; J. B. Pinner, Ch. Sewer Com.

Small, Engra., 605 Columbia Bigg., Noriois; J. B. Pinner, Ch. Sewer Com.

BIRMINGHAM, ALA.—Julian Kendrick, Cy. Engr., has submitted his report to the county board of revenue for the proposed trunk sewerage system. He proposed two main trunk sewers, one in Valley Creek and one in Village Creek, to cost about \$448,788.—The board of aldermen received the following bids for constructing the Avenue K storm sewer. Donelson & Colvin, \$30,837; Dun & Lalando Bros., \$30,877; J. McPoland (accepted), \$25,048; C. M. Burkhalter & Co., \$26,648; W. H. Cornell, \$26,608.

LOUISVILE, KY.—Press reports state that the board of trade is considering the question of improving the system.

NEWPORT, KY.—Bids are asked until Dec. 18 for constructing about three miles of brick or concrete and pipe sewers, as stated in our advertising columns. B. R. Morton, Cy. Engr.

DAYTON, O.—F. M. Turner, Cy. Engr., writes us that

DAYTON, O.-F. M. Turner, Cy. Engr., writes us that he sewer work in Riverdale is now about completed. NEWARK, O.—George C. Wilson is said to have submitted the lowest bid at \$3,152 for constructing a sewer in Cedar St.

Cedar St.

WELLSVILLE, O.—A special election will be held Nov.
27 to vote on the question of issuing \$00,000 in bonds for constructing a system and \$75,000 for water-works.

SULLIVAN, IND.—Alonso Hammond, Engr., Terre Haute, writes us that this town has adopted plans for a complete system, but work is not likely to be started before next spring.

ST. BAILL MINN.—The council will construct sewers.

stemplete system. Set work as not have to be sarred before next spring.

ST. PAUL, MINN.—The council will construct sewers on Wells, Baker and Dale Sts. Otto Bremer, Cy. Treas.

CHAMBERLAIN, S. DAK.—Bids are asked until Nov. 22 for constructing a system and a brick shop at the Chamberlain Indian School. W. A. Jones, Comr. Indian Affairs, Department of the Interior, Washington, D. C.

FORT YATES, N. DAK.—Bids are asked until Dec. 8 for constructing sewer and water systems, etc., at the Standing Rock Agency. W. A. Jones, Comr. Indian Afairs, Department of the Interior, Washington, D. C.

BUTTE, MONT.—F. C. Bickenbach, Cy. Engr., writes us that action on the West Galina St. sewer has been post-poued until next year.

ST. LOUIS, MO.—Bids are asked by the board of a works until Dec. 7 for constructing brick and pipe is in Rock Branch sewer district No. 8 and in t., sewer district No. 1. Robert E. McMath, Pres. dw. Flad, Secy.

BONHAM, TEX.—M. J. Kelly, of Gainesville, has made proposition to the council to construct a system to cost

CORSICANA, TEX.—The council has ordered the construction of several sower extensions, according to re

SALINA, KAN.—The council has decided to construct an 18 and 21-in. pipe sewer in West Ash St.

KALEMA, ORE.—Press reports state that this town is considering the question of building a system.

BERKELEY, CAL.—The council has decided to construct a sewer on Home St.

EUREKA, CAL.—The council is said to be considering the question of constructing a system.

HEALDSBURG, CAL.—Local papers state that the council is considering the question of constructing a system.

LONG BEACH, CAL.—The city engineer is preparing estimates for a main sewer in Second St., and also for several laterals.

NAPA CAL.—The CALL—The C

NAPA, CAL.—The council has, it is stated, directed the try engineer to prepare plans for constructing a sewer in

FASADENA, CAL.—We are informed that the contract for constructing about 4,600 ft. of 8 and 10-in. sewers in Adelia Ave., Walnut, Villa and Park Sts. has been let to S. J. Edwards, at \$3,2.5. W. B. Clapp, Cy. Engr.; Heman Dyer, Cy. Cik.

Dyer, Cy. Clk.

PETALUMA, CAL.—The city clerk has been directed to advertise for bids for constructing a sewer in Washington St., East Petaluma, and for constructing a sewer for hose house No. 2 on Hopper St.

SANTA BARBARA, CAL.—Bids are asked until about Dec. 20 for constructing 1,533 ft. of 8-in. pipe sewer, average cut 6 ft. J. K. Harrington, Cy. Engr.

VALLEJO, CAL.—The board of public works has passed a resolution of intention to construct a 10-in. pipe sewer in Monterey St. T. J. O'Hara, Cy. Cik.

OGDEN UTAH—A F. Parker, Cy. Engr. inforce and construct as

in Monterey St. T. J. O'Hara, Cy. Cik.

OGDEN, UTAH.—A. F. Parker, Cy. Engr., informs us
that owing to protests of citizens the sewer on 24th St.
will not be built at present.

SAULT STE. MARIE, ONT.—The provincial board of ealth has recommended that this city extend its sewer and

LITTLE CURRENT, ONT.—It is stated that the council is considering the question of improving the present

HAMILTON, ONT.—E. G. Barrow, Engr., writes us that nothing will be done regarding the proposed dis-posal plant until next May. The city is waiting to se-cure a grant from the government.

GARBAGE DISPOSAL-STREET CLEANING

BOSTON, MASS.—A proposition is being considered by the city officials for removing the garbage disposal plant rom its present position at Cow Pasture to some island in the harbor, at a cost of about \$200,000.

DOVER, DEL.—The Sanitary Garbage Product Co-hiladelphia, has been incorporated with a capital

Philadelphia, has been incorporated with a capital of \$133,000.

PARKERSBURG, W. VA.—Bids are asked until noon Nov. 26 for removing the garbage, etc., for 1901. Bond, \$1,000. Frank Good, Cy. Cik.

LOUISVILLE, KY.—The board of public works has prepared an ordinance providing for the separation of ashes and rubbish from garbage and liquids. It provides that each householder shall keep separate receptacles for garbage and rubbish, into which the refuse of the kitcher must be dumped. The ashes will be sent to the dump and the garbage to the incinerator.

CHICAGO, ILL.—The council garbage committee has reported in favor of a crematory at the municipal lighting station in Chicago Ave. and Sedgwick St. It is proposed to build crematories in each ward. W. F. Brennan, Chu MILW-Allikeer, Wis.—The council has verted to be the

Garbage Com.

MILWAUKEE, WIS.—The council has voted to let the contract for furnishing and constructing a crematory to the Engel Sanitary & Cremation Co. The city will pay the company \$12,500 for the royalties and \$29,160 for the machinery.

the company \$12,500 for the royalties and \$29,100 for the machinery.

OAKLAND, CAL.—The question of building a saltwater plant for street sprinkling to cost \$100,000, with other questions of public improvement costing over \$1,000,000 additional will shortly be voted upon. It is contemplated to use iron-stone glazed pipe, but the difficulty is to find a joint which will resist the action of the saltwater. The other improvements proposed include sewers, drainage, paving, bridges, school houses city hall, etc. Address Councilmen B. C. Cuvellier and Frank K. Mott; Mayor W. R. Shaw, and J. W. Tompkins, Cy. Cik.

STREETS AND ROADS.

BOSTON, MASS.—Bids are asked by the Massachusetts Highway Commission, 4 Mt. Vernon St., until Nov. 22 for constructing about 3,800 ft. of state highway in the town of Harvard.—The board of health has ordered that Boylston Place be asphalted.

HARTFORD, CONN.—The council has decided to pave Albany Ave. with asphalt, to cost about \$6,060. Henry F. Smith, Cy. Cik.

Albany Ave. with asphalt, to cost about \$6,060. Henry F. Smith, Cy. Cik.

NEW HAVEN, CONN.—C. W. Kelly, Cy. Engr., writes us that the council has as yet taken no action regarding the paving of Congress Ave., Elm and Crown St.

NORWALK, CONN.—C. N. Wood, Cy. Engr., writes us that the council has ordered the paving of Armory Hill and has appropriated the money for the work, but owing to the lateness of the season work will not be started until spring.

NEW YORK, N. Y.—The board of estimate has decided to issue \$33,000 in bonds for repaving West 86th St.

CAMDEN, N. J.—J. J. Albertson, County Engr., Magnolia, received the following bids Nov. 12 for macadamizing the River Road. Fred W. George, Cik. Bd. Freeholders: John H. Hurley, Trenton, \$34,150; J. R. Shanley, 14 South Broad St., Philadelphia, Pa., \$31,000; J. W. Ireland, Philadelphia, Pa., \$31,000; J. W. Ireland, Philadelphia, Pa., \$31,000; J. W. Ireland, Philadelphia, Pa., \$33,000; B. F. Sweeten & Son, Camden, \$30,615 (accepted); Gonder & Fritz, Strausburg, Pa., \$32-189; Dennis Roe, Trenton, \$33,064.—The Camden & Suburban Ry. Co. has decided to pave Third St.

JERSEY CITY, N. J.—The board of finance has let the contract for improving Marion Place, North Hudson, to

TRENTON, N. J.—On Nov. 23, this city will sell \$52,646 in bonds for constructing street improvements, etc. W. J. B. Stokes, Cy. Treas.

ALLECHENY, PA.—The people of this city voted, Nov. to issue \$330,000 in bonds for streets improvements. PITTSBURG, PA.—Bids are asked until Nov. 24 for rading, paying and curbing Dallis Ave. George W. Wilm, Dir. Dept. Pub. Wks.

on, Dir. Dept. Pub. Wks.

WASHINGTON, D. C.—The district commissioners have referred that B St., N. E., be paved with asphalt, to cost bout \$4,000; that Flagler Place be asphalted, to cost bout \$5,000; that new granite curbs be constructed on he following strets: School St., N. W., to cost about \$1,074; H St., N. W., to cost about \$1,700; on Whitley ve., N. W., to cost about \$2,000; on Eric St. and On-prio Ave., to cost about \$2,000; on Eric St. and On-prio Ave., to cost about \$3,400, and on Fourth St., N. E., o cost about \$1,600; and that all alleys in square No. 20 be paved, to cost about \$2,200; in block No. 3, Cliff-curne, to cost about \$2,004, and in square No. 216, to set \$1,460.

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, Mag-damiz-eehold-stone & ley, 14 ireland, amden, ., \$32,-

103 be paved, to cost about \$2,290; in block No. 3, Cliff-bourne, to cost about \$2,604, and in square No. 216, to cost \$1,460.

SAVANNAH, GA.—We are informed that the proposed paving and sewer work here will be done by G. M. Gads-elen, Dir. Pub. Wks., by force account, according to plans prepared by Waring, Chapman & Farquhar, 874 Broadway, New York, N. Y.

BESSEMER, ALA.—Bids are asked until Nov. 27 for constructing about 18,400 lln. ft. of 5-in. granite curbing, C.050 cu, yds. of earth excavation and about 2,600 cu, yds. of chert 4 ins. deep on several streets. Edgar L. Mifchell, Cv. Clk.

cy. Cik.

BIRMINGHAM, ALA.—Bids are asked until Dec. 5 for paving Avenue K with brick. Julian Kendrick, Cy. Engr. NEW ORLEANS, LA.—W. J. Hardee, Cy. Engr., writes us that nothing has been done toward letting contracts for the proposed extension of Carrollton Ave., as the city has been unable to secure the necessary ground. The city attorney has been directed to institute expropriation proceedings.

CINCINNATI, O.—The contract for improving Wold Ave. is said to have been let to Wm. Flynn at \$1,593.

TOLEDO, O.—The city engineer has received the following lowest bids for paving Erie and Floyd Sts: Erie St., Garrigan Bros., Athens block, on concrete foundation, \$3,041; on sand, \$2,876; Buckeye block, on concrete, \$3,001; on sand, \$2,862; Logan or Metropolitan block, on concrete, \$3,003; on sand, \$2,856; Kreedone creosoted block, on concrete, \$4,594; on sand, \$2,856; Kreedone creosoted block, on concrete, \$4,594; on sand, \$4,482; for asphalt, \$4,037. All bids were with Berea curb. On Floyd St. the Warren-Scharf Asphalt Paving Co., Nasby Bidg., was low on Trinidad pitch lake asphalt, with Medina curb, at \$7,639, and with Berea curb at \$7,639; the Cleveland Trinidad Paving Co. was low on Trinidad asphalt with Medina curb, at \$7,639, and with Berea curb at \$7,639; the Cleveland Trinidad Paving Co. was low on Athens, Wassall, Metropolitan and Nelsonville block, at \$5,929, and on Harris pavers at \$3,874; C. H. Burchinal was low on asphalt block with Berea curb, at \$7,038; the Cleveland Trinidad curb, at \$7,638, and with Berea curb at \$7,206; C. W. McKinney was low on Athens, Wassall, Metropolitan and \$3,874; C. H. Burchinal was low on asphalt block with Berea curb at \$7,8782.

PEORIA, ILL.—H. G. Beasley, Cy. Engr., writes us that the matter of paving St. James St. and Bradley Ave. is

PEORIA, ILL.—H. G. Beasley, Cy. Engr., writes us that the matter of paving St. James St. and Bradley Ave. is still before the board of public improvements and nothing definite has been done.

definite has been done.

OREGON CITY, ORE.—J. H. Cunningham, 430 Chamber of Commerce, Portland, is preparing estimates for a new road up the bluff at this place. Mr. Cunningham is Acting City Engineer during the construction of the sewers being built by Mitchell & Hard, of Seattle.

COLUSA, CAL.—Bids are asked by the county clerk until Jan, 9 for constructing about 4½ miles of the Arbuckle-Sulphur Creek road.

LOS ANGELES, CAL.—The council has passed an ordinance providing for the paving of Herendo St. C. H. Hance, Cy. Cik.

Hance, Cy. Cik.

MONTEREY, CAL.—The board of city trustees is said to be considering the question of grading and improving Lighthouse Ave.

OAKLAND, CAL.—The council has decided to include in the bond issue which will be voted on next month \$85,000 for grading and macadamizing Commerce St.—The council has passed resolutions providing for the macadamizing of East Tenth St. and Lester Ave. J. W. Tompkins, Cy. Cik.

Clk.

POMONA, CAL.—Press reports state that this city will purchase a road roller.

SAN FRANCISCO, CAL.—The board of public works has passed a resolution providing for the paving of the following strets: Sacramento St., to cost about \$3,077; Clay St., to cost about \$3,122; Pine St., to cost about \$2,193, and Grant Ave., to cost about \$7,087.

SANTA ROSA, CAL.—Press reports state that the question of issuing bonds for road improvements in the Forest-ville county, is being discussed.

HONOLULU H. L.—The street committee has decided to

HONOLULU, H. I.—The street committee has decided to acadamize Miller and Punchbowi Sts. Morton Campbell,

MANUFACTURING PLANTS.

AUGUSTA, ME.—The Allston Foundry Co. has been in-corporated, with \$200,000 capital stock. Geo. S. Boutelle, Pres., Worcester, Mass.; Samuel H. Kimball, Treas., Bos-

BINGHAMTON, N. Y.—Charles E. Lee, Binghamtofi, may be addressed regarding the new cement plant to be erected at Collins Point. Conveyors, stone crushers, etc., will be wanted.

BUFFALO, N. Y.—It is stated that Geo. F. Frazier, Newark, N. J., of the New Jersey Rubber Co., has been trying to interest local capitalists in a scheme to estab-lish a factory for the manufacture of rubber goods in this

CAMDEN, N. J.—It is stated that the Knickerbocker lee Co., Philadelphia, is preparing to erect an ice plant in this place.

in this place.

ORANGE, N. J.—It is stated that the Morris Electric Co., of New York, has decided to build a factory in East Orange for the manufacture of street cars and a general line of electrical supplies. Ed. B. Morris, Treas, has selected a site for the plant, which will employ 70 hands. TRENTON, N. J.—Axel Engstrom, Arch., Bullitt Bidg., Philadelphia, has plans for a plant to be erected by the De Laval Steam Turbine Co. Three large buildings will be constructed. No contracts have been let.

CHESTER, PA.—Reports state that the Peun Steel Casting & Machine Co. is preparing to make extensive additions to its plant. The improvements will include a new machine shop and four large ovens.—R. B. Ross, Chester, is said to have induced a machine manufacturing company, of Philadelphia, to erect a plant in this town.

LANCASTER, PA.—William Steele & Son, Witherspoon ildg., has plans for a machine to be built by Geo. V. Crescon & Co., in this city.

PHILADELPHIA, PA.—Stearns & Castor, Archs., Stephen Gerard Bidg., have plans in preparation for a leather plant to be built at Summerdale. The plant will cost about \$50,000. The same firm has plans for a five-story factory to be built in Frankfort.

PHILADELPHIA, PA.—Plans are being prepared by Hales & Ballinger, Arch., 1200 Chestnut St., for a large factory for Fels & Co., at 73d St. and Woodland Ave.

PITTSBURG, PA.—Reports state that improvements, extensions and additions are proposed by the Carnegie Co. to its various plants, on which about \$10,000,000 will be expended. It is stated that the Edgar Thomson plant, Bessemer, will close down shortly to be repaired at a cost of about \$100,000.

Tabout \$100,000...
CONCORD, N. C.—A syndicate headed by B. E. Harris
as purchased a site on which a cotton mill will be erected,

CONCORD, N. C.—A syndicate besieve by the erected, has purchased a site on which a cotton mill will be erected, according to reports.

CHARLESTON, S. C.—The Royal Bag & Yard Mfg. Co. is said to have placed orders for the machinery for a new cotton mill, to be built in this city. The building will be 100 × 200 and three stories in height. The plant will have 5,000 spindies and 130 looms. Capital stock, \$225,000. Geo. A. Wagener, Pres.

THOMASTON, GA.—E. H. Mitchell, Thomaston, writes

THOMASTON, GA.—E. H. Mitchell, Thomaston, writes us that a 40-HP. boiler and engine and a pump, with a capacity of 200 gallons per minute, will be needed for the hide plant to be built at this place.

FLORENCE, ALA.—The Cypress Mfg. Co. will erect a plant for the manufacture of hoops and barrel heads, according to reports. John R. Jones, Secy.

NEW ORLEANS, LA.—The Meeker sugar refinery at Meeker was destroyed by fire Nov. 9; loss reported at about \$200,000.

BARBERTON, O .- The Miller Brewing Co. will erect a cold storage plant at the corner of Bolivar road and Baird

Ave.

CLEVELAND, O.—H. E. Hackenburg, Secy. Iroquois

Portland Cement Co., informs us that the Wellman-Seaver

Engineering Co. will have charge of the engineering work

for the construction of the cement plant to be erected by

the company at Caledonia, N. Y.

FINDLAY, O.—A refinery is reported proposed for this town. Clint Corthell and T. C. Keley are interested. A committee is said to have left for the east to purchase machinery.

NILES, O.—Reports state that the American Sheet Steel Co. will ereqt an eight-sheet mill plant on the ground adjoining the Russia mill, at this place.

ground adjoining the Russia mill, at this place.

SALEM, O.—The Buckeye Engine Co. is reported to have let the contract for an addition to its plant to the Fort Pitt Bridge Works, of Allegheny, Pa.

WADSWORTH, O.—It is stated that the Ohio Match Co. will crect a new plant in this town in the near future. The building will be \$0 × 69 ft., with an L 43 × 50 ft.

DETROIT, MICH.—The Standard Portland Cement Co. has been incorporated, with \$1,000,000 capital stock. A plant will be established at Hamburg Junction. Geo. H. Barbour, Pres.; John Curry, Vice-Pres., and M. L. Williams, Treas.—The plant of the Detroit Bridge & Iron Works was damaged by fire on Nov. 14 to the extent of \$75,000.

WEST BAY CITY, MICH.—The German-American Co-

WEST BAY CITY, MICH.—The German-American Co-operative Beet Sugar Co. has been organized to build a sugar factory at this place, to cost \$300,000. GENEVA, ILL.—The plant of the Appleton Mfg. Co., in this city, was destroyed by fire on Nov. 14. The loss is reported at \$250,000. The company manufactured farm machinery.

MILWAUKEE, WIS.—The Browning Mfg. Co., it is stated will build a \$160,000 factory, for which a site has already been selected.—It is stated that the Nordberg Mfg. Co. will erect new works for the manufacture of engines in the town of Lake. The plant will cost about \$200,000.

\$200,000.

HELENA, MONT.—Local capitalists are planning to construct a sugar beet mill at a point on the Yellowstone River. A refinery is also being considered.—The O'Brien Lumber Co. has been organized, with \$650,000 capital stock, but will erect a saw mill on Flatbush Lake, to have a capacity of at least 50,000,000 ft. of lumber a year. John O'Brien, Kalispell, is interested.

MISSOULA, MONT.—The Missoula Brick & Cement Co. has been incorporated, with \$25,000 capital stock, to manufacture cement, pottery, tiling, etc. A. C. Hollenbeck, R. M. Coffan and A. E. Pond, Missoula, are interested.

WHARTON, TEX.—The Wharton Sugar Co. has been in-corporated with \$160,000 capital stock. A plant will be oulit at Wharton, on which work will be started in Jan-nary. Leigh Ellis, Pres., and C. G. Ellis, Mgr.

OKLAHOMA CITY, OKLA. TER.—Preliminary steps a being taken for the formation of a company, capitaliz at \$150,000, to build and operate a factory for the purpo of using the hulla from the oil mill to make paper.

ABERDEEN, WASH.—A wood alcohol plant, requiring an investment of \$50,000, will probably be built in Aberdeen. W. L. Burner, Saginaw, Mich., is interesting local capitalists in the project.

capitalists in the project.

SAN FRANCISCO, CAL.—The Wunder Brewing Co. has been incorporated, with \$250,000 capital stock, to build a brewery in this city. H. Bendel, John C. Wundel and Rudolph Herman are interested.

CHICOUTIMI, QUE.—It is reported that the Chicoutimi Pulp Co. will erect new pulp mills at an early date..

MISCELLANEOUS CONTRACTS.

FIRE HOSE.—Fremont, Neb.—Bids are asked until Nov. 29 for furnishing 500 ft. of 2½-in. fire hose. E. N. Morse, Ch. Bd. Pub. Wks.

WHARF.—Selkirk, Man.—Press reports state that a government engineer has made surveys for a government wharf 100 × 600 ft. here.

WHARF.—Madison, Conn.—At a special town meeting \$2,000 was appropriated for rebuilding the west wharf dock, according to reports.

FIRE ENGINE.—Ottawa, Ont.—Bids are asked until Dec. 4 for one quick-firing piston fire engine. James White, Chn. Fire and Light Com.

DAM.—Kincardine, Ont.—Press reports state that R. C.

DAM.—Kincardine, Ont.—Press reports state that R. C. Stewart, Engr. Dept. Public Works, Ottawa, has recommended the construction of a dam here.

VAULT.—Washington, D. C.—Bids are asked until Dec. 3 for constructing a new vault in the register's office, Treasury Dept. Bidg. Jas. K. Taylor, Supv. Arch., Treasury Dept.

FIRE APPARATUS.—Akron, O.—Bids are asked by the board of city commissioners until Nov. 24 for furnishing one combination truck, hose wagon and chemical. F. F. Loomis, Mech. Engr.

LAMPS.—New York, N. Y.—Bids are asked until Nov. 24 for supplying 2,500 pendant and bracket lamps, with extra parts for same. A. S. Kimbail, Asst. Q. M. Gen., U. S. A., Army Bidg., Whitehall St.
ALTERING BOAT.—Norfolk, Va.—Bids are asked until Dec. 20 for lengthening and altering the U. S. snag-boat "Roanoke," as stated in our advertising columns. Address the U. S. Engr., 166 Granby St.

DREDGING—Saginary Mich.—Bids are asked by the

DREDGING.—Saginaw, Mich.—Bids are asked by the board of public works until Nov. 23 for dredging a channel across the "Middle Ground" from the Saginaw River to Emerson Bayou. Alfred Davies, Clk. Bd.

DREDGING.—Dry Tortugas. Fla.—Bids are asked until Dec. 22 for removing about 310,000 cu. yds. of material from the channel around Garden Key. Dry Tortugas, Fla. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

DREDGING.—Dry Tortugas, Fin.—Bids are asked until Dec. 22 for removing about 310,000 cu. yds. of material from the channel around Garden Key. Dry Tortugas, Fia. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.
TRAVELING CRANE.—Detroit, Mich.—Bids are asked until Dec. 12 for constructing a hand-power traveling fing. Spler & Rohns, Archs, 824 Chamber of Commerce; H. S. Starkey, Gen. Mg.
MARINE BOILERS.—Baltimore, Md.—The following bids are asid to have been received Nov. 1 by the inspector of the fifth lighthouse district for constructing two marine boliers for the tender "Maple:" James Clark Co., Baltimore, \$10,270 (accepted); Spedden Shipbuilding Co., Baltimore, \$10,270 (accepted); Spedden Shipbuilding Co., Baltimore, \$11,500; E. J. Codd Co., Baltimore, \$13,505.
NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Dec. 11 for furnishing a quantity of screws, drills, pipe sittings, valves, copper pipe, steel plates, a traveling crane, etc., at the navy yard, Mare Island, Cal. A. S. Kenny, Paymaster Gen., U. S. N.
REFRIGERATORS, ETC.—Ellis Island, N. Y. H.—Bids are asked until Dec. 7 for constructing refrigerators for the hospital out-building, the kitchen, restaurant and hospital building, and for a sterlizing and disintecting applied by the steel of the constructing perfigerators for the hospital out-building, the kitchen, restaurant and hospital building, and for a sterlizing and disintecting applied by the steel of the constructing and the steel of the U. S. Immigrant Station, Ellis Island, N. Y. H. James K. Taylor, Supy. Arch., Treasury Dept., Washington, D.C.
STATE CANAL WORK.—Albany, N. Y.—The following contracts have been let, by J. N. Partridge, State Supt.—Pub. Wks., for constructing a waste well at Albion; to Baker & Judson, Gloversville, at \$6,754, and for constructing a waste well at Albion; to Baker & Judson, Gloversville, at \$6,754, and for constructing and paymant of the constructing and paymant of the constructing and paymant of the construction of the constructing and

FOREIGN CONTRACTS

AND EXPORT NEWS.

SEWERS.—Santos, Brazil.—Reports state that the state government will build sewers for Santos to cost about 100,000 milreis.

ABATTOIR.—Lyons, France.—The municipal council has decided to build an abattoir and cattle market, to cost about \$2,000,000.

decided to build an abattoir and cattle market, to cost about \$2,000,000.

COTTOM MILL.—Orizaba, Mex.—Reports state that Hugh Gordon, Mexico City, has the contract to build a cotton mill, to cost \$200,600.

GAS AND WATER-WORKS.—Stelno, Germany.—The city council has let a contract to Engineer O. Smreker, of Berlin, to construct water-works and a gas plant.

PHOSPHATE WORKS.—Navassa, Caribbean Sea.—Reports state that Wyatt Owen, the new owner of the island of Navassa, will soon reorganize the works.

COPPER MINING.—Kingston, Jamaica.—Reports state that Messrs, Knowless and Spiro, for an English syndicate, are arranging to develop copper mines in the island.

TIMBER CUTTING.—Guatemala.—F. Arturo Ramíres has been granted a concession to cut mahogany and cedar timber in the public lands between Las Animas and Morales.

ELECTRIC RAILWAY.—Brussels, Beigium.—Reports state that new proposals have been submitted to the government for an electric road between Brussels and Antwerp, to cost about \$10,000,000. Part of the line would be under ground.

BRIDGE.—Antwerp, Belgium.—Reports state that it is proposed to build a trolley bridge over the Scheldt River.
DRAINAGE.—Holland.—The cabinet has submitted to the states-general a bill proposing to drain the entire Zuyder Zee at a cost of about \$80,000,000.

MINING.—Chil.—The International Mining & Refining Co, has been incorporated in Iquique, Chili, with a capital of \$300,000, to work mines, etc., in the Huantajaya district.

TRAMWAY.—Gijon, Spain.—Manuel Acebal, of Madrid, Spain, has been directed to make a report on the feasibil-ity of constructing an electric tramway from Oviedo to Gijon.

Olion.

PUBLIC WORKS.—Cologne, Germany.—Bids are wanted for the purchase of about \$5,000,000 of 4% bonds for proposed public works. C. I. Hudson & Co., 36 Wall St., New York.

ELECTRIC PLANT.—Ultenhage, Cape Colony.—It is stated that the council proposes to build an electric plant, to cost \$20,000.—A plant is also proposed for East London;

pop., 20,000.

STEAM TRAMWAY.—Badalona, Spain.—The Central Ry.
and Tramway Co. of Spain has a concession for a steam
tramway from Badalona to Masnou. Fernando Gillis,
Mgr., Barcolona.

Baddord Eng.—It is proposed to improve

GAS WORKS.—Bradford, Eng.—It is proposed to improve the gas works at a cost of about \$750,000, and also to ex-tend the markets, etc. C. Wood, Gas Engr.; R. M. Dun-well, Markets Supt.

tend the markets, etc. C. Wood, Gas Engr.; R. M. Dunwell, Markets Supt.

RAILWAY.—Austria.—The government proposes to build a branch of the Bosnia-Herze Provincial State Ry. to connect Sarajevo with Spalato, in Daimatia. Kari Schnack, Dir., Sarajevo, Bosnia.

SAPE MAKING PLANT.—Monterey, Mex.—The Compania Manufactura de Cajas de Seguridad de Monterey is reported to have begun work on its safe making plant, to cost about \$500,000, Mexican.

ROLLING STOCK.—Copenhagen, Denmark.— Reports state that a large amount of new rolling stock will soon be wanted by the state railways. O. F. A. Busse, Colbjornsens, gade 6, Copenhagen.

HARBOR WORKS.—Rangoon, India.—It is understood that a new harbor, breakwater, wharves, warehouses, etc., will be built. Sir Alex. M. Rendel, Consult. Engr., 8 Great George St., Westminster, London.

RAILWAY, WHARF, ETC.—Hayti.—The government has made a contract with the Railway Society of the North, at Camp Hatten, to construct a railway, a wharf, etc. The society will carry and export fruits, etc.

SMELTING FURNACES.—Buenos Aires, Argentina.—Reports state that Mr. Guggenhelm, of New York, is visiting Argentina to investigate the possibilities of establishing smelting furnaces in that country.

BUILDINGS.—Samoa.—Bids are asked until Dec. 26 for constructing a frame resident, a cook house and servants' quarters at Tutulia, Samao. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

WATER-WORKS.—Rathenow, Germany.—The has decided to build new water-works, to cost 710,000

Yards and Docks, Navy Dept., Washington, D. C.
WATER-WORKS.—Rathenow, Germany.—The has decided to build new water-works, to cost 710,000 marks. The work wil. be done according to plans of Engineer O. Smreker and will require 1½ years.
RAILWAY.—Turkey.—Bids are reported as being received by All Ferrouh Bey, the Turkish Minister at Washington, D. C., for furnishing locomotives, materials, etc., for the proposed railway from Damascus to Mecca.
IMPROVING CITY.—Buenos Aires, Argentina.—Reports state that Senor Balbin, for a French syndicate, has applied for permission to build four diagonal avenues, starting from the new palace of the National Assembly.
BUILDINGS.—Loudon, Eng.—Plans have been accepted for rebuilding Centenary Hall and Mission House, to cost about \$350,000 It is also proposed to erect in West London a Wesleyan church house, to cost about \$1,200,000.
STEEL PLANT.—Tampico, Mex.—The Mexico Jupiter

STEEL PLANT.—Tampico, Mex.—The Mexico Jupiter Steel Co., 604 Hamilton Bidg., Pittsburg, Pa., will soon begin work on its new foundry and steel plant in Tampico, and also for a new one in Pittsburg, according to reports.

PORT ELEVATORS.—Glasgow, Scotland.—Capt. E. White, R. N. R., Port Warden, Glasgow, is visiting cities in the U. S. to study the American system of handling ores and grain, with a view of introducing the system in Glasgow.

Giasgow.

ICE PLANT.—La Celba, Honduras.—Eduardo Viada is said to have applied for an exclusive concession to establish an ice plant and a soda water manufactory. The plant is to be completed within a year of the granting of the concession.

the concession.

STEAMSHIPS.—Cuba.—Reports state that a Baltimore,
Cuba and Porto Rico steamship line will be formed if the
shipping subsidy bill passes Congress. John Wilson, Alex.
Brown, Lloyd Jackson and H. A. Parr, of Baltimore, Md.,
are interested.

are interested.

COLD STORAGE HOUSE.—Melbourne, Victoria.—Reports state that the city proposes to extend the cold storage houses at a cost of over \$225,000. Address the Superintendent of the Markets; Mayor M'Eacharn, or the Chamber of Commerce.

OIL DEVELOPMENT.—Mexico.—It is stated that the Mexican Oil & Development Co., recently formed with a capital of \$1,000,000 (gold), intends to co-operate with the Mexican Central Ry. in developing oil and coal lands along the route of the railway.

the route of the railway.

ELECTRIC PLANT.—Linares, Mex.—La Compania Alumbrado Electrica y Fuerza de Linares, of Neuva Leon, has been organized, with a capital of \$100,000, to build a plant to have a capacity of 2,000 16 c. p. and 35 are lights. A. W. McLimont, Res. Engr. and Mgr.

RAILWAY.—Mexico.—It is stated that work will soon be begun on the proposed railway between Cordoba and Huatusco, Vera Cruz, a concession for which was recently granted to Juan A. Navarro. The line will pass through a rich timber and mineral country.

granted to Juan A. Navarro. The line will pass through a rich timber and mineral country.

ELECTRIC TRAMWAYS.—Glasgow, Scotland.—Reports state the corporation will soon ask Parliament for power to borrow about \$7,250,000 for additional improvements to the tramways, including new electrical apparatus, rolling stock, etc. John Young, Mgr. Tramways.

RAILWAY MATERIALS.—Chris.iana, Norway.—Bids are asked until Dec. 21 for furnishing about 11,570 tons of steel rails, with fish plates, etc. Bids were wanted until Nov. 21 for 48 axies and car wheels. A. K. Fleischer, Dir. Ways and Works, Norwegian State Rys.

HARBOR AND DRY-DOCKS.—Germany.—Reports state that the forthcoming Imperial Budget will provide for 3,500,000 marks for a harbor at Dantzig. It is also proposed to build an anchorage and harbor for warships at Kiel, and two large dry-docks at Wilhelmshaven.

GAS WORKS.—Coventry, Eng.—The gas committee will begin at once the construction of a new gas plant of 2,500,000 cu. ft. capacity. The trunk mains to Coventry will cost \$70,000, the plant about \$400,000, and preparing the land \$50,000. G. Winstanley, Gas Works Mgr.

DOCKS, ETC.—Hardepool, Eng.—It is proposed to extend and deepen the Victoria Dock and to build a new timber dock and a coal handling plant to cost about \$2,000,000. The cost of dredging for a deep water entrance is estimated to cost about \$2,000,000. H. C. Crummack,

ROLLING STOCK.—Kingston, Jamaica.—Reports state that a government secretary and a railway expert left Kingston Nov. 20 on the steamer "Admiral Schiey" for railadelphia for the purpose of placing orders for rolling stock for the Jamaica railway. L. F. Mackinnon, Gen. Mgr. and Secy., Kingston.

stock for the Jamaica railway. L. F. Mackinnon, Gen. Mgr. and Secy., Kingston.

Mgr. and Secy., Kingston.

Mining.—Spain.—It is stated that La Compagnie Generale Miniere pour le Development et l'Exploitation des Mines et Espagne et l'Etranger has been formed in Brussies, Belgium, with a capital of \$6,000,000, to work mines in Spain and other countries. About two-thirds of the capital has been subscribed.

RAILWAY.—Salvador.—Henry C. Stuart, Res. Mgr., Salvador Ry., Santa Ana, has submitted a plan to the government for a railroad connecting San Salvador to La Ceiba de Guramel, where it will join the Sonsonate line to Santa Ana. A. H. Compton, Secy., Gioucester House, Bishopsgate St. Without, London, E. C.

TRAMWAY.—Painley, Scotland.—This city proposes to erect a new electric plant, to cost about \$500,000.—C. R. Bellamy, Gen. Mgr. Corporation Tramways, Liverpool, writes us that the city is carrying out its own track work, the contracts for the cars being let to Dick, Kerr & Co., London and that for the overneed equipment to R. W. Blackwell & Co., London and New York.

REMOVING WRECK.—Havana, Cuba.—Bids are asked until Dec. 15 for removing the wrecks of the S. S. "Alfonso XII," now lying in the mount of the Harbor of Mariel, Cuba, and the U. S. S. "Maine," lying in Havana RAILWAYS.—Argentina.—The "South American Journal" states that capitalists could obtain advantageous

RAILWAYS.—Argentina.—The "South American Jour-nal" states that capitalists could obtain advantageous concessions from both the Argentine and Bolivian govern-ments for the construction of a rairoad from Jujuy, Ar-gentine Republic, to the city of Potosi, Bolivia. Jujuy is the terminus of the North Central Argentine National Ry. Dr. E. Civit, Minister Public Works Dept., Buenos Ayres, Argentina.

Ayres, Argentina.

RAALWAY, ETC.—Tampico, Mex.—Felipe Gonzales, Pres. Chamber of Commerce, Tampico, writes us that Messrs. Enrique Camago; Breton & Co., of Tampico, have not yet begun the construction of the urban railway, the material for which will cost about \$60,000. I. & F. Borde have just completed an electric plant, the materials for which came from the U. S. water-works, and a drainage system are being built by E. Pearson & Co., of London.

OIL DEVELOPMENT.—Japan.—Reports state that the Standard Oil Co. has organized in Japan the Pacific Oil Co., to carry on temporarily the work of developing the Echigo oil industry, while a permanent company composed of American and Japanese capitalists is being formed. The latter company, it is understood, will be a branch of the Standard Oil Co., of New York, and will seek to control the oil trade of Japan.

SUGAR MILLS, ETC.—Trinidad, W. I.—Reports state

the Standard Oil Co., of New York, and will seek to control the oil trade of Japan.

SUGAR MILLS, ETC.—Trinidad, W. I.—Reports state that Alfred Chapman, of Liverpool, Eng., and P. Abel, of Trinidad, West Indies, representing large sugar interests in Trinidad and British Guiana, have arrived in New Orleans to study the sugar mills and other machinery, and the new processes in vogue here in the manufacture of cane sugar. It is understood that they will place a number of contracts for machinery, etc.

DOCKS.—Bristol, Eng.—The estimates for the proposed docks are as follows: Docks proper, piers, etc., \$7,000.000: hydraulic machinery and dock equipment, \$270,000; buildings, \$600,000; new passenger station, sidings, etc., \$220,000; dredging, about \$25,000 a year. Parliament will soon be asked to grant the city power to borrow money. Sir John W. Barry, Sir Benj, Baker and A. C. Hurtzig, all M. Inst. C. E., London, are the engineers; F. B, Girdiestone, Gen. Mgr. of Docks.

TUNNEL.—Mt. Popocatapetl, Mex.—L. W. Tatum, Gen. Mgr. Oro Mining Co., 424 N. Y. Life Bidg., Chicago, Ill., writes us that surveys for the proposed mining tunnel in Mt. Popocatapetl are not yet completed, and many details have yet to be completed. No machinery will be purchased for months to come. It is proposed to build a tunnel 2,000 ft. long into the mountain to reach to the base of the crater for gathering the sulphur. J. A. Montgomery, Pres.; A. R. Carqueville, Secy, Chicago.

BRIDGE.—Denmark.—We are informed that the government proposes to build a bridge over the Little Belt to connect Jutland with the island of Fionle, to cost \$4, 600,000. The structural work will be about 3,280 ft. long, but the actual length of the bridge over the Little Belt to connect Jutland with the island of Fionle, to cost \$4, 600,000. The structural work will be about 3,280 ft. long, but the actual length of the bridge over the Little Belt to connect Jutland with the island of Fionle, to cost \$4, 600,000. The structural work will be else the supporting cables 123 ft.

build.

HARBOR.—Scheveningen, Holland.—Bids are asked by Chief Engineer Van Hoof, of the Public Works Dept., Amsterdam, Holland, for constructing an outer harbor to cost about \$300,000. Herr Wagenfahrer, of Vienna, has obtained a concession for a canal to connect the Danube, below Vienna, with the Adriatic at Trieste. The route will be almost the same as that of the railway from Vienna to Trieste, about \$19 miles in length, and will cost about \$120,000,000, according to an English consul report.

report.

HARBOR WORKS, NAVY, ETC.—Mexico.—Reports state that Secretary of War Bernardo Reyes will soon lay before Congress plans for extensive coast defenses. The plans include harbor defense works at the mouth of the Rio Grande, Tampico, Tuxpam, Vera Cruz, Progreso, and Coatzacoalcos, all on the Guif coast, and at Saline Cruz, Acapulco, Mazatlan, Manzanillo, Port Stilwell, and Gusymas, on the Pacific Coast. It is reported that there will also be a recommendation for a largely increased standing army and the creation of a navy.

FALLWAY—Siam—We are informed that the construc-

RAILWAY.—Siam.—We are informed that the construction of a meter gage line from Bangkok to Ratburl and Petchaburi, about 100 miles, has been commenced, to be completed in about three years. Bridges will be needed over the Tachin and Meklong rivers. Another line from Lopburl to Nakon Sawan is proposed. These lines are being built by the Siamese Government. Last year the Government had 158 miles under construction and 372 miles of 4 ft. 8½ in. gage line under survey. K. Bethge, Dir. Gen.; H. Gehrts, Ch. Engr., Bangkok.
BUILDINGS.—Montrery, Mex.—The Chuanhtemoc Brewing Co., R is stated, has let the contract for erecting a 7-story building to cost, including machinery, etc., not yet use being extended and a large quantity of interior furnishings will be wanted. The Bank of Commerce is erecting a new building. The "Manufacturers Record" states that Capt. Porfitio Diax, Jr., son of the President, and Rodolfo Reyes have applied for a concession to erect a

factory to cost about \$1,000,000 to make shoes, hardete, the machinery to be imported. It is proposed certain parties to erect cold-storage plants in this other important cities of the republic. The U.S. Con at Monterey, Mexico City and Tampico may be abite furnish further information.

at Monterey, Mexico City and Tampico may be able furnish further information.

BOULEVARD.—Warsaw, Russia.—The municipal carling proposes to let contracts soon for constructing brawards along the River Visitula, to cost over \$1,000.00 and Mr. Siemiczew, of Warsaw, has a concession to build electric tramway from Czenstockhowa, on the Warsaw Vienna Ry., to the Russian frontier town of Herby concession for another tramway of about 50 kilometers connect with Warsaw was recently granted. W. Armi. Newy-Swiat, Warsaw, suggests that Americans make effort to secure the contracts for supplies.

LAND DEVELOPMENT.—Honduras, Nicaragua.—National Industrial Co., with a capital of \$3,000,000, been organized in Milwaukee, Wis. E. W. Perry, Patrry W. Perry, Secy.; Edward F. Brown, Treas.; C Quaries, attorney.—The headquarters of the new end and Nicaragua for the raising of tropical products, be located in Milwauke and at Cape Gracias, Nicaragual of the capital stock of the company, of which wisconsin Trust Co. is trustee, has been subscribed.

RALLWAYS.—China.—His Excellency, Wu Ting Fa Chinese Minister at Washington, writes us that therse no foundation for the report that he is arranging to contracts for railway material for the Chinese government. We states that there have been and there will opportunities for American engineering supplies in Chinese study the needs of the Chinese, to secure and exederders, etc.

to have suitable agents or representatives on the ground to study the needs of the Chinese, to secure and execute orders, etc.

TUNNEL.—Gibraltar.—U. S. Consul Monaghan, of Chemits, Germany, reports that a Parisian engineer has recently finished a plan according to which the Spanish rall-roads terminating in Gibraltar will be connected, by means of a tunnel crossing under the Srait of Gibraltar, with the rall-road lines of Morocco. Several of the men interested in the scheme are now in Morocco trying to obtain permission to build a railroad in that place. A report in January last stated that J-B. L. F. M. Berlier-Fontaine, Dir. National d'Indret Loire Inferieure, Paris, was preparing plans for the above mentioned tunnel.

RailwayS.—India.—Reports state that the Eastern Bengal Street Ry. proposes connecting Goalundo and Narainganj with a meter gage line. The scheme contemplates a railway from Lakkee Khai Hat opposite Faridpur to Munshiganj, six miles below Narainganj, the length of railway being over 40 miles, and estimated to cost is lakhs, including rolling stock, and 18 lakhs for an ordinary trans-shipment ferry at Fardipur and a wagon and passenger ferry at Munshiganj. The object is to facilitate the conveyance of the jute traffic, as Narainganj is the conveyance of the jute traffic, as Narainganj is the conveyance of the jute traffic, as Narainganj is the conveyance of the jute traffic, as Narainganj is the London, E. C., has been asked to undertake the work of widening the Suez Canal. It is understood that he will leave London for Egypt in the latter part of November. Mr. Bates will design a scheme for river, harbor and canal improvements for the Russian government. He has at present a dock contract about completed for Calcutta, and expects to plan works for Tasmania and Siam. Mr. Bates will also have charge of improving the River Scheldt at Antwerp.

improvements for the Russian government. He has a present a dock contract about completed for Calcutta, and expects to plan works for Tasmania and Siam. Mr. Bates will also have charge of improving the River Scheldt at Antwerp.

RAILWAYS, ETC.—China.—Reports state that the Chinese have destroyed about 200 miles of track on the Manchurian Ry. and burned a number of stations and rolling stock, estimated at about \$5,00,000. L. F. Horvat, Dir., Viadivostock, Siberia.—An expert has been sent out by the ailies to estimate the amount of work, etc., required to restore the railway from Tong-Ku to Shen-Hai-Kwan. About 35 miles of new track will be wanted at once, as it is desired to have the line repaired at the shortest possible moment. The great iron bridge over the Peb-Tang River will probably have to be rebuilt. A large amount of other bridge and railway work will be done this season by the ailies. The pier, to cost about \$200,000, will be built near Stan-Hai-Kwan on the Guil of Liao-Tung. Address Brig.-Gen. Chas. F. Humphrey, of Gen. Chaffee's staff, Tientsin, China.

ELECTRIC RAILWAY.—Havana, Cuba.—We are informed that the Havana Electric Ry. Co. will have lisnew line and the reconstruction of the old completed by March. All the important contracts have been let as follows: Engines, The Edward P. Allis, Co., Milwaukee, Wis.; generators and motors, General Electric Co., Schenectady, N. Y.; bollers, Cahall type, Aultman & Taylor Co., Canton, O.; condensers, Wheeler Condenser & Engineering Co., New York; structural work. American Bridge Co., New York; traveling cranes, Pawling & Harnischfeger, Milwaukee, Wis.; cars, Jackson & Sharp Co., Wilmington, Del.; trucks, MeGuire Mfg. Co., 15 Cortland St., New York, N. Y. The entire line will be about 38 miles long. The company is building the line itself. G. F. Greenwood, Gen. Mgr., 34 Empedrado. Havana; A. W. K. Biilings, Engr.-in-Charge.

RAILWAY.—Juan—The "Journal of Commerce" reports that the Hokkaldo-Tanko-Tetsudo-Kisha Ry. (the Coal Mining Ry. Co.), in Hokkaldo, the nor

RAILWAY.—Russia.—Reports state that a French syndicate, with a capital of 12,000,000 rubles, will supply the capital for a railway from Avchala to Sakabo, in the Caucasus.—It is not the property of the capital for a railway from Avchala to Sakabo, in the Caucasus.—It is not the same that at Belgrade, Servia, to be used in the prosecution of the railway from the Danube to the Advance Sea. This railway, which for part of its length paces along the boundary between Servia and Tarkey, will be entirely administered hereafter by Russian Capitalists.—U. S. Consul Monaghan, at Chemnitz, Germany, reports that the question of building a new and more direct railway between Odessa and St. Petersburg, via Kief and Wilcebity, lessening the distance about 24s will be entirely administered hereafted to build a new lines in the Donetz district next spring. It will be almost 300 miles long, and will extend from Wolonicha and Dolgnen, Dassing through rich grain and coal fields.

RAILWAYS, ETC.—Bolivia.—President Jose Manuel Pando, La Pas, Bolivia, reports in a message to congress that the construction of a railroad from the right bank of the Pilcomayo River to some of the Interior cities of Bolivia is under consideration. The government having investigated the proposed construction by North American capitalists of a railroad from Arica to Corocoro, has manifested its conformity and desire to see a realization of the project. The great increase in trade between La Paz and Lake Titicaca renders imperative the construction of a has been ordered for the repair and construction of the sporenment has not at the present time complete information regarding the project. A number of the important highways are being improved and others built. Material has been ordered for the repair and construction of the sporenment has not at the present time complete information regarding the project. A number of the important highways are being improved and others built. Material has been ordered for the repair and construction of the sporenment telegra

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waters. Works. ETC.—Holland.—We are informed that the director of the town works of Leyd, Holland, proposes to build an unicipal works.—Messrs. Duvillard & 5800,000. The communal council of Utrecht, Holland, proposes to build municipal works.—Messrs. Duvillard & Badvis have submitted a report on the scheme to convey water from Lake Leman to Paris, France, to cost about \$90,000. The council proposes to soon sak for schemes, etc. for furnishing this city with a water supply.—The Scretariat de la Mairie, Town Hail, Nantes, France, wants bids until Dec. 15 for two pumping plants, one to raise from 180 to 265 liters per second to a keight of 10.45 metrical mere for the works at La Roche. Further internation may be seen at the office of Engineering News, 220 Broadway, New York.—The communal council of Lisbech (Wurthemberg), Germany, wants bids for waterworks to tost \$12,000. —Messrs. Harre & Kreisbaumeister, of Gerdauen, Prussia, want bids for furnishing 1,180-,600 pieces of drain pipe.—It has been decided to build waterworks for the elevated district of Aumetz (Lorraine), Germany, at a cost of \$15,000.—A committee from the province and the city of Brusseis, Beiglum, propose calling for schemes for purifying the River Senne.

RALIWAYS.—Oran, Algeria.—We are informed that the council has approved the plans for the Tizi-Bel-Abbes Ry, and also for spending \$306,000 for highway work in 1801. The railway will probably be a branch of the Algerian Ry.—Count Armand, Press., rue St. Didier, 16, Paris, France, Construction Dept., Reflin, will soon let contracts for shuts and the council has approved the plans for the Rys., A. Wasmer, Dir. Construction Dept., Karlsruhe, Germany, until Dec. 1, for furnishing 16 locomotives and tenders.—Reports atto that the Royal Prussian State Rys., Alwamer, Dir. Construction Dept., Karlsruhe, Germany, until Dec. 1, for furnishing 16 locomotives and tenders.—Reports atto that the Royal Prussian State Rys., Herr Schroder, Dir. Construction Dept., Berlin, will soon let contracts for abust 10.54,

has secured a concession for a line from Seoul to Fusan, about 300 miles. The Japanese Diet has authorized its government to endorse, under conditions, an issue of Seoul-Fusan Ry. bonds, not exceeding 25 million yea, and at some appropriate time to float these bonds in Europe and America. Most of the material will be Japanese, but work will probably not commence for some time. Our correspondent thinks that neither of these lines will earn the interest on their cost, both being for political purposes. An electric plant is being built in Seoul by an American firm and the materials are now en route from the U. S. The same firm is building a 16-mile extension to the City Electric Ry., Seoul, and has placed most of the contracts in America.—A syndicate, headed by J. S. Fassett, of Elmira, N. Y., and Leigh Hunt, which has been engaged during the last your years in developing gold mines, has now two large milling plants in operation. W. P. Morgan, ex-M. P., I Queen Victoria St., London, E. C., obtained a concession last year in one of the best mining districts in the country, and engineers are now at work. Germans and Japanese have also been granted mining concessions. To the Americans, however, belongs the credit of being the actual ploneers as regards intelligent development of the mineral resources, according to the modern methods. In our issue of Nov. I we published a letter from H. R. Bostwick, of Colibran & Bostwick, American contractors, in Seoul. Address Mr. Bostwick, in care of the H. S. Crocker Co., of San Francisco, Cal.

CONTRACT PRICES.

BRIDGE.-Pittsburg, Pa.-The following bids were re-ceived Nov. 15 for rebuilding the South 10th St. bridge over the Monongahela River; John Brunner, Supt. Bu-reau Engineering and Construction;

N. Y., S-in. valves, \$19 each; 6-in. valves, \$13 each; 6-in. check valves, \$14 each; Ludlow hydrants, \$29 each f. o. b. Bloomfield (accepted). Ludlow Valve Mfg. Co., Troy, N. Y., S-in. valves, \$20.50; 6-in. valves, \$13.85; 6-in. check valves, \$14; Ludlow hydrants, \$28. E. C. McCashland, Grand Island, trenching, back filling and laying pipe complete, 8-in., 26 cts. a in. ft.; 6-in., 22 cts.; 4-in., 18 cts. (accepted). W. L. Bruce, Yankton, S. Dak, trenching, laying pipe, etc., S-in. and 6-in. pipe, lumped, 38 cts. per lin. ft.; cast iron pipe, \$30 per ton 2,000 lbs. The time for receiving bids on \$7,100 water-works bonds was extended to Nov. 19. Bids on pumps, boilers, heaters, pumping station, etc., have been laid over, pending changes in the plans.

WATER MAIN. ETC.—Atlantic City, N. J.—The follow-

pumping station, etc., have been laid over, pending changes in the plans.

WATER MAIN, ETC.—Atlantic City, N. J.—The following bids were received Nov. 12, 1900, for furnishing the materials and for constructing a force main, as advertised in Engineering News; W. C. Hawley, Supt.; Force main, high-pressure plan, (1) being for beach thoroughfare, (a) for lump bid, (b) price per ft.; (2) lump sum for connections, (3) for 30-in. wooden stave pipe, (a) lump sum, (b) price per ft., (c) totals; (3) 30-in. steel riveted pipe, (a) lump bid, (b) price per ft., (c) totals; (5) 30-in. cast-iron pipe, (a) lump bid, (b) price per ft., (c) wooden platform, a ft., B.M.; (d) estimated cost of platform, (e) totals; Low pressure plan—(6) for wooden stave pipe, (a) 30-in. pipe, lump bid, (d) price per ft., (c) 36-in. pipe, lump bid, (d) price per ft., (e) totals; (3) for cast-iron pipe, (a) 30-in. pipe, lump bid, (d) price per ft., (e) totals; (8) for cast-iron pipe, (a) 30-in. pipe, lump bid, (d) price per ft., (e) wooden platform per ft., B. M.; (f) estimated cost of platform, (g) total: The Carroll-Porter Boiler & Tank Co., Pittsburg, Pa., (1a) \$8,500, (fa) \$8, (2) \$5,500, (4a) \$134,000, (4b) \$4.90, (4c) \$148,000, (7a)

Bide	Received	at	Pittsburg,	Pa.,	Nov.	15,	1900, for Building the South 10th St. Bridge	
							Port. cem. Ad'l masonr	

Addi- Concrete Chumber - Chacking,	Addi-
tional Undr Abv. Open Open P.cem. Rub-Rip-	
Bidder. Plan piles, watr. watr, cais'n, crib, conc., ble, rap,	steel.
No. 1. No. 2. aft. ayd. ayd. M. ft. M. ft. ayd. ayd. ayd.	a lb.
*Nelson & Buchanan Co., Pittsburg\$263,500 \$255,700 \$0.46 \$7.00 \$6.20 \$36.00 \$36.00 \$10.00 \$9.50 \$1.75	80.039
Jutte & Foley Co., Pittsburg 270,000 270,000 1.00 10.00 50.00 49.00 12.00 10.00 2.50	.04
American Bridge Co., New York 279,000 271,000 1.00 10.00 8.00 50.00 50.00 12.00 10.50 2.25	.033
Chas. L. Strobel, Chicago, Ill 291,500 286,500 .47 8.40 7.35 31.50 31.50 10.50 10.50 1.05	.055
Fort Pitt Bridge Works, Pittsburg 295,717 294,910 .47 7.25 6.25 37.00 37.00 10.37 9.73 1.73	.035
King Bridge Co., Cleveland, O 299,900 304,000 .45 8.00 7.00 30.00 30.00 10.00 10.00 1.00	.035
McClintic-Marshall Const'n Co., Pittsburg 308,000 301,000 .50 8.00 7.00 40.00 40.00 11.75 11.00 2.50	.04
The Drake & Stratton Co., Pittsburg 315,000 315,000 .40 5.00 5.00 50.00 30.00 10.00 10.00 1.50	.04

^{*}Awarded contract.

*Awarded contract.

WATER PIPE, ETC.—Augusta, Ga.—The following bids were received Nov. 15, 1900, for furnishing a quantity of cast-iron water pipe, laying same, etc., as advertised in Engineering News; Nisbet Wingfield, Comr. Pub. Wks.: (1) being for furnishing about 775 short tons of 6 to 20-in. pipe, (2) for 50 tons of specials; pipe-laying—(3) for laying 2,406 ft, of 20-in. pipe, a ft.; (4) for 244 ft. of 16-in. pipe, (5) for 7,738 ft. of 12-in. pipe, (6) for 7,084 ft. of 8-in. pipe, (7) for 4,883 ft. of 6-in. pipe, (6) for 7,084 ft. of 8-in. pipe, (7) for 4,883 ft. of 6-in. pipe, (8) for setting 66 hydrants, (9) for 3 20-in. valves, (10) for 1 16-in. valves, (11) for 12 12-in. valves, (12) for 15 s-in. valves, (13) for 84 6-in. hydrants, (16) for 30 8-in. hydrants, (17) for 1 10-in. hydrant, (18) for totals: U. S. Cast-iron Pipe & Foundry Co., Philadelphia, Pa., (1) \$20.80 a short ton; (2) \$45 a short ton, (18) \$15,746 (accepted for both); Sam'l I. Pope, Chicago, Ill., (3) 53 cts. a ft., (4) 43.9 cts., (5) 26 cts., (6) 17.2 cts., (7) 15.25 cts., (8) \$2.45 each; (18) \$5,618; Rensselaer Mig. Co., Troy, N. Y., (9) \$135 each, (10) \$74, (11) \$35, (12) \$19.60, (13) \$12.90, (14) \$3, (15) 2½-in., \$33; two steamers, \$55; (18) \$4,376; Ludiow Yalve Mig. Co., Troy, N.Y., (9) \$17. (10) \$88.75, (11) \$31.35, (12) \$17.20, (13) \$11.50, (14) \$3.30, (15) \$22.50, with two steamers, \$37.40, (16) \$37.40, (17) \$90.50 and \$102.75, (18) \$4.515 and \$4.527; R. D. Wood & Co., Philadelphia, (1) \$23, (2) \$50, (9) \$87, (10) \$55, (11) \$30, (12) \$16, (13) \$10.50, (14) \$2.35, (15) \$23.80, (16) \$40.0 (17) \$80.50 and \$102.75, (18) \$4.515 and \$4.527; R. D. Wood & Co., Philadelphia, (1) \$23, (2) \$50, (9) \$87, (10) \$55, (11) \$30, (12) \$16, (13) \$10.50, (14) \$2.35, (15) \$23.80, (16) \$40.0 (17) \$80.50, (18) \$3.25 fts., (6) 20 cts., (7) 105, 50.75, (11) \$31.240, (14) \$4.30, (15) \$22.50, (18) \$4.70, (19) \$60.75, (11) \$30.50, (19) \$45.50, (18) \$4.75, (11) \$40.50, (18) \$4.75, (18) \$4.75, (18) \$4.75, (18) \$4.75, (18) \$4.75, (18) \$4.75, (18) \$4.75, (18

\$126,500, (7b) \$4.90, (7c) \$19,500, (7d) \$5.20; (7e) \$100,000, (8e) 2\frac{1}{2}\text{cts.}, (8g) \$148,000 and \$160,000; Cronin & O'Herron, Pittsburg, (1a) \$11,000, (1b) \$11, (2) \$40,000, (5a) \$33,000, (5b) \$1.20, (5c) 5 cts., (5d) \$2.000, (5e) \$56,000, (8a) \$29,800, (8b) \$1.20, (8c) \$7,000, (8d) \$2, (8e) 5 cts., (8f) \$2.000, (8g) \$50,000 and \$59,500; The T. A. Gillespie Co., Pittsburg, Pa., (1a) \$9,040, (1b) \$8, (2) \$4,750, (3a) \$133,000, (3b) \$4.85, (3c) \$146,790, (4a) \$130,000, (8b) \$4.76, (8c) \$143,790, (5a) \$49,500, (5b) \$1.50, (5c) 2.6 cts., (5d) \$1,040, (5c) \$55,330, (6a) \$96,000, (6b) \$3.71, (6c) \$15,000, (6d) \$4, (6e) \$124,790, (7a) \$123,737, (7b) \$4.75, (7c) \$20,750, (7d) \$5.53, (7e) \$158,277, (8a) \$38,550, (8b) \$1.48, (6c) \$6.840, (8d) \$1.83, (8e) 2.6 cts., (5f) \$1,040, (8g) \$146,790, \$143,790, \$55,330, \$124,790, \$158,277, \$60,220; Hawman Bros., Reading, Pa., (1a) \$17,551, (1b) \$15.55, (2) \$3,800, (5g) \$42,118, (5b) \$1.55, (5c) 5 cts., (5d) \$2.000, (5e) \$65,469, (8a) \$40,803, (8b) \$1.58, (8c)\$6,469 and \$70,923.

Cast-iron Pipe and Special Castings.

Quantities.	U. S. Cast-Iron Pipe & F'dry Co., Chicago.	R. D. Wood & Co., Phila- delphia.
Ball joint pipe 142 ton 30-in. pipe (Plan No. 1)4,540 "	ns. \$32,90	\$31.50 24.60
Special castings 55 " 36-in. pipe (Plan No. 2) 855 "	.031/4	.032 24.60

R. D. Wood & Co. also bid \$39.50 a ton for 142 tons of ball joint pipe, Plan No. 3, high or low pressure, wood or stave; \$31.50 a ton for 19 tons of cast-iron pipe, and 3.55 cts. a lb. for 55 tons of special castings. The U. S. Cast-Iron Pipe & Foundry Co. bid on pipe with ordinary conlar coating, and Wood & Co. on pipe with mineral rubber casting.

tar coating, and wood coating.

PAVING.—Kansas City, Mo.—The board of public works has let contracts at the following prices for paving sidewalks, etc.: Asphalt paving—Askew Ave., 1,556 sq., yds., \$2.12 per yard; Bales Ave., 2,400 sq. yds., \$2.15; Flora Ave., 5,753 yards, \$2.12. Brick paving—Alley between Fifth and Sixts Sts., 1,482 sq. yds., \$1.73 per yard; alley between Indiana and Bales Aves., 350 yds., \$1.67. Ganitod sidewalks—Anderson St., 4,500 sq. ft., 14.98 cts. per foot; Fourth St., 2,000 sq. ft., 14.98 cts. per foot; Fourth St., 2,000 sq. ft., 14 cts. per foot (average); Fliteenth St., 1,628 ft., 14.99 cts.; Montgall Ave., 5,000 ft.,

| Bids Received at San Francisco, Nov. 8, 1900, for | Constructing Wharf and Tramway at Point Bonita. | Rich'd McCann, | Edward Bridge & Cotton | Guif | Construction | Con

& Pacific Co. \$0.50 .50 .30.00 .04 50.00 .04 2.00 Thomson. \$0.50 .65 4.25 25.00 2.00 23.00 .055 $\begin{array}{ccccccc} .62 & .75 & .737 \\ 2.00 & 3.20 & 3.352 \\ 23.00 & 28.50 & 28.56 \\ .055 & .048 & .061 \\ 27.00 & 32.00 & 42.716 \\ .055 & .048 & .078 \\ .25 & .80 & 1.833 \\ \end{array}$ 1.50 37.00 .06 50.00 31.00 .05 .06 .50 \$14.091 \$12.511 \$15.182 \$16.841 \$15.783 \$13.244

WATER PIPE.—Cincinnati, O.—The following bids were received Nov. 13, 1900, for furnishing cast-iron water pipe and castings; (1) U. S. Cast-Iron Pipe & Foundry Co., Chicago; (2) Camden Iron Works, Camden, N.J.; G. Bouscaren, Ch. Engr. Comrs. Water-Wks.; C. G. Roth, Secy.:

Straight socket and spigot pipe 5,168 tons. \$2.50 \$28.80 \$

WATER-WORKS, ETC.—Bloomfield, Neb.—The following bids were received Nov. 6, 1900, for furnishing the materials and for constructing the water-works. Arnold C. Koenig, Engr., Grand Island, Neb.; U. S. Cast-Iron Pipe & Foundry Co., Chicago, Ill., cast-Iron pipe, 4-In., 6-In. and S-In., \$27.50 per ton of 2,000 lbs.; specials, 2½ cts. per lb. f. o. b. Bloomfield (accepted). Sweet & Doyle, Cohoss,

15.2 cts; Third St., 1,800 ft., 17 cts. Natural stone side-walks—Eighth St., 1,500 sq. ft., 30 cts. per 400t; Lydia Ave., 4,000 sq. ft., 18 cts. Plank sidewalks—Eighth St., 1,200 lin. ft., 31.90 cts., per ft.; Eleventh St., 850 lin. ft., 13.4 cts.; Second St., 765 lin. ft., 33.4 cts.; Second St., 765 lin. ft., 32.9 cts. Planting trees—Cypress Ave., 70, \$2.25 each; Highland Ave., 160, \$2.10 each; Garner Ave., 125, \$2.25 each; Indiana Ave., 47, \$2.25 each; Jackson Ave., 100, \$2.27 each; Kensington Ave., 100, \$2.41; Spruce St., 68, \$2.37; Twenty-seventh St., 43, \$2.30.

BRICK SIDEWALKS.—Council Bluffs, Ia.—The following bids were received recently by City Engineer Ethyre for laying about six miles of brick sidewalks: South of Broadway—Four-foot walks—O. K. Hardin, cash, 23 49-100 cts.; certificates, 24% cts., George F. Hughes, sample No. 1, cash or certificates, 32 cts.; sample No. 2, 27 cts., cash or certificates. Wickham, cash or certificates. Six-foot walks—Hardin, 34 cts. cash; 34 99-100 cts. certificates. Wickham, cash or certificates, 35 cts.

Hughes, sample No. 1, cash or certificates, 43 cts.; sample No. 2, 39 cts., cash or certificates. Ten-foot walks-Hardin, cash, 49 cts.; certificates, 55 cts. Wickham, cash or certificates, 50 cts. North of Broadway: Four-foot walks-Hardin, cash, 23 4-10 cts.; certificates, 24 9-10 cts. Wickham, cash or certificates, 248 cts. Hughes, sample No. 1, cash or certificates, 34 c.s.; sample No. 2, cash or certificates, 35 cts. Bix-foot walks-Hardin, cash, 34 49-100 cts.; certificates, 34 74-100 cts. Wickham, cash or certificates, 34 cs. Hughes, sample No. 1, cash or certificates, 34 cs. Wickham, cash or certificates, 36 cts. Hughes, sample No. 1, cash or certificates, 36 cts. Hughes, sample No. 1, cash or certificates, 24 cs. Wickham, cash or certificates, 59 cts. The bids for grading were: Hardin, cash, 25 cts.; certificates, 29 cts. Wickham, cash or certificates, 20 cts. Hughes, cash or certificates, 20 cts. Tre bids or certificates, 25 cts.

TRENCHING.—Yonkers, N. Y.—The following bids were received Nov. 8, 1800, for excavating and refilling trenches for about 6,000 ft. of water pipe; A. W. Kingsbury, Clk Water Bd.; price is per ft. for the pipe laying, and cu. yd. for the rock oxcavation:

Stone, Fort Field and Briggs Aves.

- Bid	der									6-in.	4-in.	Rock.
Robert A. De	SLF	in	g	В.						\$0.28	\$0.28	\$1.65
Charles Mott	ola					 	0		0	1212	1313	1.45
Fred. E. Gro	ss .					 				.31	.30	1.75
John Callaha	D					 				.28	.28	2.20
P. F. Reilly.						 				.34	.34	1.75
W. Mangini .				0.0	0 1	 				.98	.98	1.98
Grady, Kearn	8 &	E	la	ri		 				.24	.24	1.00

Palmer Ave.

	Pipe	
Bidder.	12-in. 4-in.	Rock.
Grady, Kearns & Hart	\$0.35 \$0.35	\$2.00
Robt. A. Destrange	.35 .35	1.75
P. J. Reilly	.64 .64	2.00
N. Mangini.	1.08 .98	1.98
Fred. E. Gross	.35 .31	1.75
Molloy & Murray	.24 .24	2.00
John Madigan	.34 .27	2.60
Charles Mottola	.35 .35	1.65
John Callahan	.80 .80	****

PARKWAY.—Cambridge, Mass.—The following bids were received Nov. 10, 1800, for constructing a portion of the Charles River Parkway; all are local bidders; all bids are for filling and gravel (measured in fill), except that of Eastern Dredging Co., which is for filling only, measured in secows; H. E. Whiting, Gen. Supt. of Parks:

025; Bourbon Copper & Brass Works, Cincinnati, 22 fire hydrants, \$23 each; 8-in. valves, \$14 each; 6-in. valves, \$9 each; 5-in. valves, \$5.85 each; T. C. Brooks & Sons, Jackson, Mich., 271 net tons of cost-iron pipe, \$22 a ton; Eric City Iron Works, Eric City, Pa., engine, \$1,300; Gem City Boiler Works, Dayton, O., two boilers, heater, feet pump and piping, \$2,500; Cn.cago Brage & from Works, Chicago, Ill., stand-pipe, 14 x 00 ft., \$3,978; Jas. B. Claw & Sons, Chicago, regulating valves, \$300; T. C. Brooks & Sons, pipe laying, 5-in. pipe, 22 cts. a in. ft.; 6-in. pipe, 20 cts.; 4-in., 18 cts.; W. G. Nagie & Co., Toledo, O., pole line for electric plant, \$2,870; Fort Wayne Electric Co., Fort Wayne, Ind., dynamos, station equipment and iamps, \$3,200; Perry kendrics, Waynesvine, pump and power building, \$3,824.

INDUSTRIAL NOTES.

THE SCHENECTADY LOCOMOTIVE WORKS, Schenectady, N. Y., has just finished ten freight locomotives for the Cape government railway in South Africa.

THE ENTERPRISE MFG. CO., Columbiana, O., has an order from the U. S. government for 100 of its 3-ton reversible horse road roliers, to be delivered within 60 days.

THE CUMBERLAND HYDRAULIC CEMENT & MFG. Co., Cumberland, aid., announces that the plant to replace the one burned in July is nearing completition. The new plant will be one of the best in the country.

THE BROWN HOUSTING MACHINERY CO. Cleveland.

new plant will be one of the best in the country.

THE BROWN HOISTING MACHINERY CO., Cleveland, has been incorporated as successor to the Brown Hoisting & Conveying alacaine Co. Mr. W. A. Stateiman, Havemeyer Bidg., New York, is manager of the eastern office.

THE B. F. SPURTEVANT CO., BOSTON, is reported to have received lecent orders for blowers, engines, etc., aggregating 200 for Japan, 75 for Russia, 40 for Germany, 32 for Canada and 24 to Sweden, as well as a large number for other places.

WM. B. SCAIFE & SONS, Pittsburg, are erecting new buildings for the frequois from Works, South Chicago, Ill., including a boiler house, engine house and cast house; also immense coke and immessione bins, involving a large tonnage of structural steel and plates.

tonnage of structural steel and plates

THE McCLINTIC MARSHALL CONSTRUCTION CO., Pottstown and Pittsburg, has the contract for building the new two-story brass toundry for the Westinghouse Electric & Mfg. Co., at East Pitisburg. The company has the contract also for the erection of a steel building at Alexandria, Ind., for the Kelley Ax & Tool Co.

Bids Received at Cambridge, Mass., Nov. 10, 1900, for Constructing a Portion of the Charles River Parkway.

Bidder.	Filling, 150,000 cu. yds.	Gravel, 40,000 cu. yds.	drain, 220 lin. ft.	cut-off, 20 lin. ft.	Total.
w England Dredging Co., 12 Post Office Squarestern Dredging Co., 25 Congress St	\$0.441/4	\$0.70	\$1.15	\$2.00 1.25	\$95,043
rries & Letteney, 1014 Tremont Bldgnroe & Crockett, 60 State St., Room 5	.51%	.80	3.50 1.50	2.50 1.80	106,245 113,366
stern Dredging Co., 25 Congress St	.75	1.00	1.10	2.00	152,782 51,750

PIPE SEWER.—Greeley, Colo.—The following bids were received Nov. 2, 1900, for constructing 1,320 ft. of 8-in. pipe sewer, Dist. No. 8; M. P. Henderson, Cy. Cik.; all local bidders: A. A. Howard (accepted), 41 cts. a lin. ft; John O'Donnell, 48½ cts.; John S. Holland, 40 cts. and 48 each for manholes; Frank D. Branham, \$555, complete. LifeBoATS.—Washington, D. C.—The following bids were received by S. I. Kimball, Gen. Supt. U. S. Life Saving Service, for furnishing ten 34-ft. soil-righting and self-balling lifeboats with centerboard: Chas. S. Rossiter & Co., Baltimore, Md. (2 boats), to complete Aug. 2, 1901, \$3,000; Samuel Ayers & Son, Upper Nyack, N. Y., Sept. 202, \$3,750; Frank J. Smith, Port Huron, Mich., Jan. 15, 1902, \$3,750; Frank J. Smith, Port Huron, Mich., Jan. 15, 1902, \$3,500.

STREET LIGHTING.—Minneapolis, Minn.—The follow-

months, \$3,900.

STREET LIGHTING.—Minneapolis, Minn.—The following bids were received Nov. 10, 1900, for street lighting. G. W. Sublette, Cy. Engr.; E. R. Dutton, Asst. Cy. Engr.; Minneapolis Gas Light Co., gas. \$1 a 1,000 ft., burners of 4 cu. ft. per hour and to burn 1,800 hours per year, posts, \$4 a year per post; Minneapolis General Electric Co., electric lights, 174, all night schedule, burning 3,000 hours a year, 3.1 cts. per hour; 690, moon schedule, burning 2,000 hours a year, 442 cts. an hour.

MACADAM FOAD —Hourgen. Tex.—The following bids

MACADAM ROAD.—Houston, Tex.—The following bids were received Nov. 8, 1900, for constructing four miles of macadam road on the Richmond highway:

HISCORNELL LONG ON THE VEICHMONE	Try Day is on?	-	62 . 1 h
Items.	Hipp &	Borden	Grigsby Const'n
	Key.	Tell.	Co.
Grading and excavation, a cu.yd.		\$0.15	\$0.10
Ditching and excavating, a cu.yd.	.12	.15	.10
Excavation for culverts, a cu.yd.	.30	.25	.25
Creosoted lumber a M. ft		32.50	36.00
Brick (culverts), a M		23.00	16.00
10-in. Fayette gravel A, a sq.yd.		1.08	.891/
10-in. Fayette gravel B, a sq.yd.		1.20	.97
Macadam pavement, a sq. yd	.75	1.75	1.05
Sand, rock and gravel, a sq.yd			.90
Shell, a sq. yd		.95	.72
Shell and gravel, a sq. yd		1.15	.83
Q in rook 4-in shall 2-in sand vd	.65		.83

cts. a sq. yd.

WATER-WORKS, ETC.—Waynesville, O.—The following contracts were let Nov. 13, 1900, for furnishing the materials and for constructing water-works. G. L. Mc-Kibben, Consult. Engr., Van Wert, O.: John H. Mc-Gowan Co., Cincinnati, O., two 750,000-gallon pumps, \$2,-

THE STANDARD CHAIN CO., Pittsburg, has an order for 600 tons of chains for the U. S. government, to be made at the Lebanon Chain Works, Lebanon, Pa. It has an order also for all the chains for the 23 new vessels being built by the American Shipbuilding Co., about 450 tons, the latter to be made at the Hayden Rolling Mills, Columbus, O.

an order also for all the chains for the 23 new vessels being built by the American Shipbuilding Co., about 450 tons, the latter to be made at the Haydon Rolling Mills, Columbus, O.

RENNOUS, KLEINLE & CO., Baltimore, are said to have just received the largest single order ever given in this country for paint brushes. It is from the Pittsburg Plate Glass Co., and cails for 385,000 brushes of different varieties and sizes, valued at about \$60,000. The brushes will fill seven ordinary freight cars and will weigh about 6½ tons. The first shipment, 55,000 brushes, was made to the Chicago office of the company last week.

THE EASTERN SHIPBUILDING CO., Groton, Conn., is announced in press reports to have begun work on two iron steamships to cost \$5,000,000. It is stated that the vessels will have a length of 630 ft., beam 73 ft. and depth 56 ft., with 33,000 tons displacement and will run from the Pacific coast to Orlental ports in connection with the Great Northern Ry. The report says that several hundred men are already at work at the new plant at Groton and that fully 2,000 will be employed there.

THE AMERICAN BRIDGE CO., New York, has just closed a contract with the North German Lloyd Steamship Co. for the erection of two steel buildings on the banks of the River Weser, at Bremen, Germany. The machine shop building will be 100 ft. in width and 300 ft. in length, two stories in height. The foundry building is 75 ft. in width and about 600 ft. in length.—The company has a contract for furnishing over 700 tons of structural steel for the New York navy yard naval power depot, near Dover, N. J., and the naval magazine at iona Island, N. Y. It is also furnishing from its East Berlin, Conn., plant, the steel work for a power station for the Hartford Electric Light Co., at Hartford, Conn.

BETHLEHEM STEEL CO., South Bethlehem, Pa., has recently received an order from the Anaconda Copper Mining Co., Anaconda, Mont., for a hollow-forged fluid-compressed steel shaft 17 ft. 10 ins. long and 15½ ins. to 20 ins. diameter with

Seymour.

American Oil & Gas Co., Winchester, Ind.; \$50,000; T.

F. Hart, A. W. Brady, J. A. Chambers.
Oid Colony Construction Co., Kittery, Me.; \$50,000; E.

J. Jones, E. H. Watson, both of Everett; F. E. Rowell.

A. Wyckoff & Son Co., Elmira, N. Y.; manufacture wood pipe; \$50,000; E. L. Wyckoff, E. J. Patterson, Henry Simpson, H. C. Mandeville.

Practicular Frame & Metal Co., New Jer Register
& Trust Co. Bldg., East Orange, N. J.; Registration cycle and other frames; \$60,000; Charles
e Trust Co. Bidg., East Orange, N. J.; manufacture of cycle and other frames; \$60,000; Charles A Fox, John & Kaufman.
Kauiman.
Belgo-Canadian Pulp Co., Canada; \$500,000; Joseph Devolda, 141 rue de Stamart: Herman Cor.
volda, 141 rue de Stassart; Herman Coru. 18 rue du Commerce: Georges de Laveley, rue du Pris.
Commerce; Georges de Laveley, rue du Prince Royal; Ed- mond De Vylder. 19 rue de l'Industrie. Rrue du Royal; Ed-
mond De Vylder, 19 rue de l'Industrie, Brussi Ed United States Construction Co., Fort Wo
United States Construction Co., Fort Word Texticol struction of railroads: \$10.000: D. Bolan
etruction of railroads; \$10,000; D. Bolan, C. Hurley,
R. M. Richardson.
Keene's Cement, Co., Glade Spring, Va.; \$50,000; 7.
Best, W. F. Dendy, P. A. Simmons.
Eggers Brick Co., Cleveland, O.: \$150,000: U. P.
H. W. Kitchen J. A. Smith.
Railway Electric Refrigerating Co., Wiln gion, Del.
manufacturing machinery for producing ice and refriger.
H. L. Richardson, Plainfield, N. J.
J. F. Engle, New York; H. L. Snyder, Montalir, N. J.
Newtown & Flushing Gas Co., Flushing (L. I.), N. J.
clair, N. J.; Edward J. Patterson, Plainfield, J.
The Citizens' Gas Light & Coke Co., Findle O. the
000; J. M. Barr, D. L. Davis, M. D. Hosler.
National Cas Common Co Can Election
Kibbe, San Francisco; B. F. Ellis, Berkeley.
Perfection Rail Joint Co., Parkersburg, W. Va. \$500,000; W. S. Dean, Anaconda, Mon.; R. E. Horner, F.
\$500,000; W. S. Dean, Anaconda, Mon.; R. E. Horner P.
Automatic Railway Switch Co., Denver, Colo.; \$600,000
H. V. Johnson, R. E. Goodell, J. T. Eksnidge, W. E.
Rapid Safety Filter Co., Minneapolis, Minn.; manufact.
ure water filters; \$25,000; A. Massolt, O. F. D. Day, D. G.
Buffalo Union Furnace Co., N. Y.; manufacturing ale
Buffalo Union Furnace Co., N. Y.; manufacturing pig iron and steel; \$1,200,000; F. B. Baird, H. J. Pierce, H. P.
Bissell, G. C. Riley, J. H. Metcalf, S. H. Baird, W. J.
Eastern Electric Manufacturing Co., Washington, D. C.
electrical goods: \$1 000 000: S D Newcomb D B s.

National Frame & Metal Co. New York

Eastern Electric Manufacturing Co., Washington, D. C. electrical goods; \$1,000,000; S. D. Newcomb. D. R. Zeigler, D. Messick, Washington; J. Rohrback, Frederick, M. Columbia Electric Supply Co., 1 Montgomery St., Jeney City, N. J.; \$50,000; Clarence E. Sutherland, Frank I. Eckerson, George W. Flancke.

Aliston Foundry Co., Portland, Me.; \$200,000; G. S. Boutwell, Worcester, Mass.; W. W. Whitcomb, Brookline, Mass.; L. Carleton, W. A. Morgan.

Manufacturers' Gas Co. of Coudersport, Coudersport, Pa.; \$150,000; P. C. Blaisdell, Bradford; J. M. Carpenter, Galeton; J. F. Stone.

Kansas Oil & Gas Co., Topeka, Kans.; \$50,000; L. G. Neely, Press., St. Mary's, O.; C. C. Nelson, Secy., Pl. Scott; C. Murdock, Treas., Lafayette, Ind.

Iron Elevator & Transfer Co., Buffalo, N. Y.; maintain grain elevators; \$100,000; M. Churchill, Chicago, Ill.; L. S. Churchill, Toledo, O.; G. W. Bartlett, T. E. Ferguson.

Bellaire, Benwood & Wheeling Bridge Co., Wheeling, W. Va.; \$500,000; W. C. Jutte, Pittsburg, Pa.; J. M. Grady, Pa.; manufacture of iron and steel; \$1,000; D. Rowland, Allegheny; S. G. Patterson, Avaloon; J. H. Dewalt, W. N. Ogden.

South American Asphalt Paving Co., Jersey City, N. J.; \$500,000; R. J. Wortendyks.

Mail Delivery Notice.

Complaints are frequently sent to us because subscribers do not receive their papers on time. The first pages of Engineering News go to press on Monday each week, the next 32 pages on Tuesday, and the remaining pages, including "Wants," "Proposals" and "For Sale" cards, early on Wednesday. All papers for Boston, Philadelphia, Washington and Greater New York should be received upon the first delivery Thursday. The last of the entire edition is in the New York post-office soon after 6 o'clock Thursday morning. If your paper is not received promptly we suggest that you, make a complaint in writing to your local post-office officials. This will be investigated and the letter forwarded to the office where the delay occurs.

\$600,000; dge, W. E.

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I. Pierce, H. P.
Baird, W. I.
Baird, W. I

Mass.; \$20,000; Mass.; \$50,-Lewis, R. H. Pa.; \$25,000; Son, Elmira; Doe, Brad-20,000; E. M.

Minn.; \$500,. Cal.; A. S. nooga, Tenn.; Brown, A. E.

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papers for eater New

is in the Thursday mptly we citing to e investi-where the

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